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ABSTRACT

A study assessed cooperative vocational education programs since enactment of the Vocational Education Amendments of 1976. During the study, questionnaires were administered to training sponsors, teacher-coordinators, and students from 80 high schools in Arizona, Minnesota, Ohio, Oklahoma, and Virginia. All vocational program areas were included in the study with a mixture of participants from small, medium, and large high schools. Based on the study findings, the researchers recommended that teacher-coordinators be hired on not less than 10-month contracts and that they devote at least 65 percent of their contract day to coordination responsibilities with the balance of time spent maintaining contact with the classroom setting. They further suggested that the related class be given a time allocation of not less than five hours per week for the expressed purpose of providing the bridge needed by students between vocational classroom training and the world of work. Because of the importance of working with special populations, the researchers also recommended that teacher-coordinators be given inservice training on how to work with handicapped or disadvantaged students in cooperative programs. Finally, they encouraged administrators supervising cooperative programs to develop guidelines to provide opportunities for students who are potential dropouts and in high unemployment areas. (Copies of the three survey questionnaires are appended.) (MN)

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AN ASSESSMENT OF COOPERATIVE VOCATIONAL EDUCATION PROGRAMS SINCE THE EDUCATION AMENDMENTS OF 1976

BY

Gary Murdock Lloyd
Utah State Office of Education

National Study on
Cooperative Vocational Education
Conducted at The National
Center for Research in Vocational Education
Ohio State University
1981

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ABSTRACT

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This study was designed to:

1. Locate "models" of Cooperative Vocational Education across the country at a secondary level.

2. Evaluate existing programs in all vocational program areas to determine successful components of the Cooperative method of instruction.

3. Assess the degree of priority given by states to the 1976 Educational Admendments where specific instruction is given. . . to areas that have high rates of school dropouts and youth unemployment, as well as high priority to program requirements in the areas of the handicapped and disadvantaged.

4. Determine the degree to which secondary Cooperative Vocational Education is a viable training method of instruction.

States selected for the study by a jury of experts were

Arizona, Minnesota, Ohio, Oklahoma, and Virginia. Teacher-Coordinators, Students, and Training Sponsors were contacted directly to complete separate survey instruments.

All vocational program areas such as agriculture and business and office, were included in the study with a mixture of participants from small, medium, and large high schools.

Conclusions

The following components are appropriate for selecting quality Cooperative Vocational Education programs at the secondary level:

1. A qualified teacher-coordinator who is certified in at least one of the vocational program areas as defined by the U. S. Department of Education.

2. A teacher-coordinator who frequently performs the following (assignments are ranked by the greater amount of time coordinators spend in that particular assignment):

   a. Teach related class
   b. Visit training sponsor at least every six weeks
   c. Contact employers about job openings for students
   d. Advise student vocational organization (DECA, FFA)
   e. Evaluate Cooperative Vocational Education students in class as well as on the job
   f. Develop student performance objectives
   g. Conduct follow-up of former students

3. The teacher-coordinator teaches the related class which includes content consisting of the following:

a. Attitudes

b. Employer-employee relationships

c. Communications

d. Employer-Customer relationships

e. Information on current technology

f. Economic information

4. Seventy-five percent or more of the teachers contract time is allocated to the role of teacher-coordinator.

5. The teacher-coordinator is employed ten months or longer to effectively complete the responsibilities that are included in the coordinator position.

6. Teacher-student ratio per hour of release time for coordination is eleven students.

7. Characteristics of a student entering a cooperative program include the following:

a. The student has an occupational or vocational intent.

b. The student is in twelfth grade.

c. The student has received prior vocational program training.

RECOMMENDATIONS

1. State departments of education and local education agencies, because of the unique nature of the coordinators duties, should hire teacher-coordinators on not less than ten month contracts.

2. At least 65 percent of the teachers contract day should be devoted to coordination responsibilities with the balance of the contract time allowing the teacher to maintain sufficient contact with

the classroom setting.

3. The related class should be given the time allocation (not less than five hours per week) for the express purpose of providing the bridge needed by students between vocational classroom training and the world of work.

4. Local administrators should provide sufficient time for a quality CVE program to develop in order to reap the benefits of this method of vocational instruction.

5. Vocational Advisory Committees should meet more frequently and with more focus on their responsibilities in order for the effectiveness of the committees to improve.

6. Congress and State legislatures should look carefully at the outcomes produced by this method of instruction and act accordingly with specific funding directed to these programs.

7. Because of the importance of working with Special populations, teacher-coordinators should be given inservice training by the school district or by the State Education Department on how to work with handicapped and disadvantaged students in cooperative programs.

8. Administrators who supervise cooperative programs should be encouraged to develop specific guidelines that will provide opportunities for students who are potential dropouts and areas where high unemployment exists to become participants in a Cooperative Vocational Education Program.

Acknowledgements

A number of persons have assisted in the preparation of this dissertation. Colleagues at the Utah State Office of Education have over the past several years been subjected to my concerns and interest in the topic of this study. Their reactions have given me continuing interest and aided considerably in my intent to move forward in this research effort.

Colleagues at the National Center for Research in Vocational Education, The Ohio State University (where the study was conducted) have given support and counsel as the study progressed.

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CHAPTER I

INTRODUCTION

Traditionally, the mission of vocational education has been to bridge the gap between vocational program preparation of the student and the student's entrance into the working world. A major goal of cooperative vocational education is to give students who seek career goals an opportunity to use their vocational training directly with part-time employment in a supervised job setting.

Cooperative vocational education as a method of instruction is not new. Congressional support with specific direction and financial assistance is relatively new, however, since the passage of the 1968 vocational education amendments.

The 90th Congress in its passage of the vocational amendments thought highly enough of the results established by participants of CVE that it provided funds for extending the program to additional types of students, particularly those students in areas with high rates of school dropouts and youth unemployment.

The rationale for this inclusion in the law was that the guidelines established for students entering CVE would be equally effective for all types of students regardless of background or ability. Disadvantaged and handicapped students were also included for high priority in the development of vocational education training programs under the 1976 amendments.

The cooperative plan for utilizing community training stations has been encouraged for many years in a number of vocational program

areas. This highly effective method of instruction gained the attention of Congress when the National Advisory Council on Vocational Education stated:

> "The part-time cooperative plan is undoubtedly the best program we have in vocational education. It consistently yields high placement records, high employment stability, and high job satisfaction."[1]

The strong support of secondary school principals was also indicated for the cooperative vocational education method. In this regard they stated:

> This study presents strong evidence that cooperative education programs are highly successful; that they appear to be meeting their intended objectives and generating support from students, instructors, administrators, and employers. These programs appear able to serve far larger numbers of students than are presently enrolled....[2]

The National Association of Secondary School Principals has gone on record as recommending increased funding for cooperative education because of the benefits accrued from this approach.

Some vocational educators have shared a "guarded" optimism toward cooperative vocational education. Tonne and Nanassy in reviewing work experience programs in the area of business education, indicate that some educators who have worked with cooperative vocational programs see no real contribution to the field of education. One reference of note, cited in their work comes from J. Marshall Hanna, Professor Emeritus

---

[1]Ed Nelson, Development of Cooperative Vocational Education Programs under the Vocational Education Amendments of 1968, Public Law 90-576, Resource Manual 71 (Washington, D.C.: Government Services Administration, 1981).

[2]National Association of Secondary School Principals. Curriculum Report. (Washington, D.C., 1973), p. 9.

of Vocational Technical Education at The Ohio State University.

> Unfortunately, cooperative programs established on the secondary school level are little more than work experience programs. They represent true cooperative education on paper but not in actual practice. In all too many cases these programs have been merely a convenient source of part-time help for employers who neither understand nor are fundamentally interested in training youth.
>
> While there are some values in just plain work experience, these values can be overestimated. The advantages must be measured in terms of the price the student pays for their work experience.
>
> That price is acceptance of a restricted educational program in school, limited participation in extracurricular activities, and a decrease in leisure and recreational time.[1]

Mary Marks, from the division of Vocational and Technical Education, United States Department of Education, Washington, D.C., while attending a National Seminar on Cooperative Education in 1966 at the National Center for Vocational Education, The Ohio State University, stated the continuing need to maintain the integrity of CVE.

> For example, let's not go overboard on cooperative education to the point of weakening other ways of providing vocational education. Let's not lable all "work experience" programs for our young people "cooperative education" just because they are school-approved. Some have vocational guidance purposes; others are wage-producing or cultural enrichment programs. The point I want to make is that we must raise no false hopes; we must serve well the great expectations characteristic of cooperative education.[2]

A number of guidelines have been established for Cooperative Vocational Education. Huffman indicated that the Cooperative Vocational Education method of instruction requires at least the following participants:

---

[1]Herbert A. Tonne, and Louis C. Nanassy, Principles of Business Education (4th ed.; Gregg Publishing Division, McGraw-Hill Book Company, Inc., 1970), p. 165.

[2]Mary V. Marks, "Vocational Integrity in Cooperative Education," Guidelines in Cooperative Education and Selected Materials from the National Seminar Held August 1-5, 1966 (Columbus, Ohio: The National Center for Vocational Education, The Ohio State University, 1967), p. 186.

1. A teacher-coordinator representing the local education unit, whose major responsibility is to organize the activities of the program around the career interests and goals of the participating students. The teacher-coordinator correlates in-school instruction of the student as well as the learning activities that will take place with the employer at the training station.

2. A student, who after receiving vocational instruction in a particular program area, has the opportunity to apply learned skill at a training station as a participant in the cooperative vocational education program.

3. A training sponsor who is a participant in the cooperative vocational education experience by providing employment and training experiences to the benefit of the student and training stations.[1]

In differentiating between Cooperative Vocational Education and Work Experience methods of instruction, Mason and Haines advanced the following, concerning Cooperative Vocational Education:

* The primary and overriding purpose is to provide occupational competence at a defined entry level. Instruction must be geared to a set of definable performance objectives, providing students with financial assistance, or employment, or even the inducement to stay in school.

* The instruction both in-school and at the training station are correlated closely with learning experiences. It is this interest which provides the student's motivation for learning.

* The kind, extent, and sequence of the training station learning experiences are correlated closely with the kind, extent, and sequence of the in-school learning experiences. This correlation is maintained by a coordinator who also teaches or a coordinator with sufficient time to work closely with the instructors of the student.

* Students may elect the cooperative plan only when they possess the employability characteristics acceptable in the marketplace as well as necessary basic knowledges and skills prerequisite to employment. To use a quotation attributed to

---

[1]Harry Huffman, Coordinator, Guidelines in cooperative education, a Report Resulting from a National Seminar held August 1-5, 1966, at the Center for Research in Vocational and Technical Education, The Ohio State University, (Columbus, Ohio: The Ohio State University, 1967), pp. 1-2.

Charles Prosser, the student who enters cooperative instruction "must want it, need it, and be able to profit from it."

* The employment situation must be truly a training station where the firm understands and accepts its teaching responsibility and where an individual is given time to act as a training sponsor, one who can fulfill the role of the downtown laboratory teacher.

* The employment conditions are not only legal employment, but acceptable by all other standards of the school.

* The coordinator has sufficient time to carry out coordination responsibilities and be accountable for quality education.

* Instruction is characterized by its individualization, by the use of projects, by remediation as required, and by interaction with the program of a youth organization.[1]

An important aspect about the Cooperative Vocational Education program is that each local education unit has a somewhat unique need to operate the cooperative program according to student and employer needs and interests. A Cooperative Vocational Education program, somewhat different from other work experience programs, must become flexible to those needs. Established cooperative vocational education guidelines provide maximum efficiency for those wishing to operate cooperative programs at the highest level.

STATEMENT OF THE PROBLEM

The objectives of this study were:

1. To determine the degree to which secondary cooperative vocational education is a viable training educational method of instruction.

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[1]Ralph E. Mason and Peter G. Haines, Cooperative Occupational Education and Work Experience in the Curriculum (Danville, Indiana, The Interstate Printers and Publisher, Inc., 1972) p. 15-17.

2. To assess the degree of priority given by states to the 1976 education amendments where specific instruction is given...to areas that have high rates of school dropouts and youth unemployment, as well as high priority to program instruction in the areas of handicapped and disadvantaged.[1]
3. To evaluate existing programs in all vocational program areas to determine successful program components of the Cooperative method of instruction.
4. To locate "Models" of CVE programs across the country at the secondary level for those wishing to develop strong CVE programs.

More specific objectives of the study sought to determine:

Teacher-coordinator

1. Characteristics and qualifications--are such things as work experience, previous teaching experience important to success as a teacher-coordinator.
2. Preparation and Certification--do teachers who are certified make stronger teacher-coordinators over teachers who are not certified.
3. Duties and responsibilities--do differences in duties and responsibilities among teacher-coordinators contribute significantly toward their effectiveness.

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[1]U.S. Congress, Educational Amendments of 1976, Public Law 94-482, 94th Congress, (Washington, D.C.: U.S. Government Printing Office, 1976) Section 110, 122.

Training Station and Sponsor

1. Characteristics and qualifications--what is the make-up of a highly desirable training sponsor.

JUSTIFICATION FOR THE STUDY

In 1963 Congress passed the Vocational Education Act. Part of the provision of the Act provided formula grants for the purpose of assisting each state in strengthening its cooperative vocational education programs. The Educational Amendments of 1968 provided continuation of that funding. In 1976 the Educational Amendments provided optional funding for Cooperative Vocational Education. In essence, the states had opportunity to begin or strengthen existing programs. The congressional approval for funding such cooperative programs was designed to prepare students for employment in a specific occupation or in a similar cluster of like occupations.

Priority for federal funding of these programs under the 1976 Educational Amendments is given to school districts with high rates of school dropouts. Each state is also required to assure that students attending non-profit private schools also have opportunity to participate in Cooperative Vocational Education programs.

In a review of the literature concerning CVE Programs, much of the research suggests that Cooperative Vocational Education is one of the most viable approaches for preparing people for the world of work. One reference in particular states that, "Cooperative Vocational Education works very well in motivating students."[1]

---

[1]A paper prepared for presentation to the U.S. Congress by The Secretary of Education, Status of Cooperative Vocational Education in FY 1979, August, 1980.

Recent figures released by the Department of Education however, show a decrease in the number of students who are enrolling in cooperative programs. From 1977 to 1979 there was a 14% decrease in enrollment in Cooperative Vocational Education.

There have been no national evaluation studies conducted on Cooperative Vocational Education since passage of the 1976 Educational Amendments.

As part of the amendment requirements, provisions were included to assure that--

> "Priority for funding Cooperative Vocational Education programs through local education agencies is given to areas that have high rates of school dropouts and youth unemployment and to the extent consistent with the number of students enrolled in nonprofit-private schools in the area to be served, whose educational needs are of the type which the program or project involved is to meet, provision has been made for the participation of such students."[1]

DEFINITIONS

The following definitions will assist the reader in a review of the study:

Cooperative Vocational Education - A program of vocational education for persons who, through written cooperative arrangements between school and employers, receive instruction, including required academic courses and related vocational instruction by alternation of study in school with a job in any occupational field, but these two

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[1]U.S. Congress, Educational Amendments of 1976, Public Law 94-482, 94th Congress, (Washington, D.C.: U.S. Government Printing Office, 1976) Section 122 (e) (f).

experiences must be planned and supervised by the school and employers so that each contributes to the student's education and to employability. (P.L. 94-482)

Coordination - Visitations made by a teacher-coordinator to a student's training station for placement, supervision, and evaluation as well as for correlating the job experiences with the related instruction.

Disadvantaged - Persons (other than handicapped persons) who have academic or economic handicaps and who require special services and assistance in order to enable them to succeed in vocational education programs.

Handicapped - Persons who are mentally retarded, hard of hearing, deaf, speech impaired, visually handicapped, seriously emotionally disturbed, crippled, or other health impaired persons.

Local Education Agency (LEA) - A board of education or other legally constituted local school authority having administrative control and direction of public elementary or secondary schools in a city, state, or any other public educational institution or agency having administrative control and direction of a vocational education program.

Advisory Committee - A group of persons representing employers and employees of business and industry selected for the purpose of offereing advice and counsel to the school regarding the occupational program.

Related Cooperative Instruction - In-school course specifically designed to develop and improve attitudes, knowledges, and employability

skills. This course is specifically designed to meet the need of the student who is enrolled in cooperative vocational education, the captstone to the vocational training program.

Teacher-Coordinator - The member of the school faculty who teaches and supervises the students participating in a cooperative education program.

Training Agreement - A document signed by the student, employer, and teacher-coordinator clarifying the responsibilities of each and defining the length, time and hours, and rate of pay for the work experience.

Teaching Plan - A plan determining the specific learning experiences which will be provided on the job and the specific related learning which will be covered in school.

Training Sponsor - The job supervisor who is directly responsible for the training and supervision of the student-trainee.

Training Station - The location of the work and the employer cooperating with the school in the cooperative education program.

Vocational Education - Organized educational programs which are directly related to the preparation of individuals for paid or unpaid employment, or for additional preparation for a career requiring other than a baccalaureate or advanced degree.

DELIMITATIONS TO THE STUDY

1. Collection of data was confined to the five states of Arizona, Minnesota, Ohio, Oaklahoma, and Virginia offering strong cooperative vocational education programs.

2. Within the five states selected, the number of school districts used were limited to five urban districts, five medium size districts, and five small school districts.

3. The study was limited to secondary vocational education programs offering cooperative vocational education as a method of instruction.

4. There was no attempt to compare cooperative vocational educational programs with other kinds of cooperative programs such as work experience, diversified cooperative, or work study programs.

5. The national study was conducted with limited financial resources thereby limiting the author's ability to include more states and programs in the study.

SUMMARY OF CHAPTER

Cooperative Vocational Education is the culminating activity of a student who has taken a number of vocational courses in the 11th and 12th grades of high school in preparation for a career. This activity provides the student with the opportunity to use the vocational training received in an actual employment setting. Under the cooperative method of instruction, a wide range of activities and responsibilities is provided for the student in school and on the job. Systematic evaluation of training stations and in-class activities becomes essential in high quality programs in the cooperative area. The student works approximately sixteen hours per week, and is paid the minimum wage. The student is supervised by a teacher-coordinator who

assists him or her to bridge the gap between the world of work and vocational training received at the high school more easily.

The training sponsor under agreement provides supervised work experience for the cooperating student during the time of enrollment in the cooperative vocational education program.

The purpose of this study was to determine the location of highly successful programs in Cooperative Vocational Education at the secondary level and to evaluate existing successful models in all vocational program areas to determine successful program components of the cooperative methods of instruction.

Finally, the study sought to assess the degree of priority given by states to the 1976 educational amendments where specific priority is given to areas that have high rates of school dropouts and youth unemployment.

This National Study was conducted in cooperation with the National Center for Research in Vocational Education, The Ohio State University.

CHAPTER II

REVIEW OF LITERATURE

INTRODUCTION

During the past 10 years, there has been a sufficient variety of nonresearch literature available in regard to both the general and specific aspects of Cooperative Vocational Education. The studies that have a research base in overall evaluation of Cooperative Vocational Education, however, are limited. Four studies have been conducted on a national level during the past 10 years. During the past 15 years, there have been several studies conducted at the state level in the area of CVE. A number of related studies have been reviewed.

The review of literature which follows, contains a synopsis of the studies and research completed in the area. The studies included here are classified into nine areas: Goals and Elements of CVE, Special Populations, The Role of Vocational Guidance and Counseling in CVE, The Role of the Teacher Coordinator, The Training Sponsor, Characteristics of the Student Learner, Follow-up of Graduating Students, Comparative Studies on CVE, and Chapter Summary.

COOPERATIVE VOCATIONAL EDUCATION LEGISLATION

Cooperative Vocational Education is defined in the 1976 educational amendments as:

> ...a program of vocational education for persons who, through cooperative arrangements between the school and employers, receive instruction, including required academic courses and related vocational instruction by alternation of study in school with a job in any occupational field, but these two experiences must be

> planned and supervised by the school and employers so that each contributes to the student's education and to his or her employability. Work periods and school attendance may be on alternate half days, full days, weeks or other periods of time in fulfilling the cooperative program.[1]

With the passage of the Vocational Education Amendments of 1968 under provisions indicated in Part G, Cooperative Vocational Education received the first significant support from Congress. Specific regulations were given the states for inclusion in their state plans. In part, the provisions indicated:

> In order to prepare young people for employment through (a) providing meaningful work experiences combined with formal education enabling students to acquire knowledge, skills, and appropriate attitudes, (b) removing the artificial barriers which separate work and education, and (c) involving educators with employers, creating interaction whereby the needs and problems of both are made known, thereby making it possible for occupational curricula to be revised to reflect current needs to various occupations, funds allotted to the states for the purpose of Part G of the Act may be used for the expansion of Cooperative Vocational Education programs, and for ancillary services and activities which are necessary to assure quality in such programs.[2]

In addition, the act indicated that state boards for vocational education were instructed to include provisions in their state plans providing for the establishment of Cooperative Vocational Education programs within local education agencies. Public and private employers also were encouraged to participate in the cooperative program. Added

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[1]U.S. Congress, Educational Amendments of 1976, Public Law 94-482, 94th Congress, (Washington, D.C.: U.S. Government Printing Office, 1976) Section 195.

[2]Ed Nelson, Development of Cooperative Vocational Education Programs under the Vocational Education Amendments of 1968, Public Law 90-576, Resource Manual 71 (Washington, D.C.: Government Services Administration, 1971).

emphasis was given in the act for the establishment of cooperative vocational education programs in new and emerging job fields.

On February 26, 1969, Roman C. Pucinski, then congressman from the State of Illinois, and chairman of the Subcommittee on Education spoke to the National Conference on Cooperative Vocational Education, held in Minneapolis, Minnesota, and indicated that under 1968 Educational Amendments, Part G, that federal funds might be used for four purposes:

1. Training and support of coordinators.
   The success of cooperative programs rests on the ability of coordinators to serve as catalysts of change both within the school and between the school and the community. They must furnish students with attractive jobs and relevant curricula, cultivate businesspersons' interest in the school and in vocational education, and bring the school and the community together in the education of young people.

2. Instruction related to work experience.
   The limited funds authoruzed were intended for vocational instruction directly related to job experience.

3. Reimbursement to employers for certain added costs.
   The intent was that employers should pay students a full wage and provide them with jobs where they can advance, but should be reimbursed for costs over and above the costs of training ordinary employers.

4. Payments to students for certain costs.
   The intent was to overcome minor economic obstacles which prevent students from participating--tools, carfare, books uniforms, etc.[1]

Additional provisions in the 1976 amendments developed by Congress called for cooperative vocational education to address two areas where little attention had been drawn in the past.

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[1]Roman C. Pucinski, Congressional Expectations of Cooperative Vocational Education, A presentation at the National Conference on Cooperative Vocational Education held February 26, 1969, at the University of Minnesota, (Minneapolis, Minnesota: University of Minnesota, 1969) pp. 41-42.

> ...Priority for funding cooperative vocational education programs through local educational agencies is given to areas that have high rates of school dropouts and youth unemployment; ...To the extent consistent with the number of students enrolled in nonprofit private schools in the area to be served, whose educational needs are of the type which the program or project involved is to meet, provision has been made for the participation of such students.[1]

GOALS OF COOPERATIVE VOCATIONAL EDUCATION

Borow in his scholarly paper addressing the National Conference on Cooperative Education focused the following thoughts on Cooperative Vocational Education:

> "Broadly speaking, three goals of vocational education are pursued in the work experience aspect of cooperative education programs. First, the student learns the characteristic skills, duties, and practical understandings associated with the occupation to which he is assigned through a training station. These are cognitive learning. Secondly, he acquires what we may call a work ethos, a set of attitudes, rules of etiquette, and interpersonal skills involving relations with fellow workers, supervisors, and clients. In short, he learns how society, and especially his place of work, expects him to "play the game." It is astonishing to what degree the school and the community assume that any student who is making the transition from school to employment has somehow mastered work protocol and the repertoire of unwritten and informal, yet highly critical, situational skills. It may be noted, parenthetically, that among culturally disadvantaged youth it is the utter lack of an acceptable work ethos quite as fully as inadequate training in the formal duties of the job that makes the work situation seem so bewildering and terrifying and which so frequently predisposes such novices to almost certain failure. Thirdly, the school youth enrolled in a cooperative education program may come to know better what manner of person he is--what strengths, limitations, aspirations, and personal values characterize him. These personal attributes are, as a matter of fact, frequently shaped and fortified by the work

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[1] U.S. Congress, Educational Amendments of 1976, Public Law 94-482, 94th Congress, (Washington, D.C.: U.S. Government Printing Office, 1976) Section 122.

> experience itself. If the student is the fortunate beneficiary of wise and sensitive supervision, he will learn to see himself psychologically mirrored in the work situation.[1]

Mason and Haines concluded after conducting two studies in the State of Michigan that there are general goals that form a part of all cooperative vocational education. Their list includes:

* Career Orientation
* Work Exploration
* Economic Awareness
* Skill Development
* Skill Application
* Upgrading Skills
* Job Placement[2]

SPECIAL POPULATIONS

Included in the term special populations are those individuals who are termed "disadvantaged" or "handicapped." Public Law 94-482 passed by Congress in 1975 specified certain services and programs relating to the handicapped and disadvantaged student that were to be implemented. The law further defined the handicapped and disadvantaged student.

> ....The term "handicapped," when applied to persons, means persons who are mentally retarded, hard of hearing, deaf, speech impaired, visually handicapped, seriously emotionally disturbed, crippled, or other health impaired persons who by reason thereof require special education and related services, and who, because of their handicapping condition, cannot succeed in the regular vocational education without special education assistance or who require a modified vocational education program.

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[1] Henry Borow, "Potential Contributions of Cooperative Education to the Student's Vocational Development", (paper presented at the National Conference on Cooperative Vocational Education, Minneapolis, Minnesota, February, 1969).

[2] Ralph E. Mason and Peter G. Haines, Cooperative Occupational Education and Work Experience in the Curriculum, (Danville, The Interstate Printers & Publishers, 1972), p. 11.

> ....The term "disadvantaged," means persons (other than handicapped persons) who have academic or economic handicaps and who require special services and assistance in order to enable them to succeed in vocational education programs, under criteria developed by the commissioner based on objective standards and the most recent available data.[1]

Because the law (94-482) lacked clarification on the issue as to whether the handicapped and disadvantaged student should be separated from the "mainstream" student, the then U.S. Commissioner of Education, Ernest L. Boyer, in 1978 filed the following clarification:

> The removal of the handicapped or disadvantaged students from the regular education may occur only when the nature of severity of the handicapped or disadvantaged is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily. In order to achieve this end, handicapped and disadvantaged students should be placed, if possible, in a mainstreamed program.[2]

Richardson in her study indicated that:

> Providing disadvantaged youth with education that will prepare them for productive employment and guarantee them the satisfactions of full life is a crucial and difficult task.[3]

A study by Lee in identifying the number of high school cooperative education programs that served low-average ability students in the State of Illinois found that the needs of very few low-average ability students were served by Cooperative Office Education programs. Results

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[1]U.S. Congress, Educational Amendments of 1976, Public Law 94-482, 94th Congress, (Washington, D.C.: U.S. Government Printing Office, 1976) Section 202.

[2]U.S. Department of Health, Education, and Welfare, RESURGE, '79, (U.S. Government Printing Office, Washington, D.C., 1979), pp. 44-45.

[3]Ruth Richardson, An Evaluation of Part G Cooperative Vocational Education Programs in Selected High Schools in the State of Tennessee--1973-1974. The University of Tennessee, 1974.

of the teacher-coordinator interviews in Lee's study indicated that low-average ability students benefited from participating in cooperative education programs as a result of their experience in cooperative education. Lee's study determined the major problems of working with low-average ability students were (1) the difficulty of securing training stations for the student, (2) developing appropriate personal qualities and (3) the lack of adequate materials in the classroom for those involved in cooperative education with special needs.[1]

A National study by Walsh on urban Cooperative Education Programs indicated that since 1968, there has been a substantial number of disadvantaged and below average Cooperative Vocational Education programs.

Walsh credits this increase to the 1968 educational amendments.

Walsh further indicated that a substantial number of programs have been designed specifically for students of below average to average academic standing, and for disadvantaged students.[2]

Goldston sought to examine the perceptions of students, teachers, parents, and employers toward special Cooperative Vocational Education for disadvantaged students. She found in her survey that students, teachers, parents, and employers alike agreed on the importance of a cooperative program in which students could participate:

> "The participants of the study perceived the program to be important as a direct means of helping students improve their punctuality, school attendance and academic achievement.....

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[1]Charlotte A. Lee, "A Study of Cooperative Office Education Programs in the State of Illinois to Determine the Nature and Extent to Which Such Programs Serve the Needs of Low-Average Ability Students." (unpublished Master's Thesis, Northern Illinois University, 1966).

[2]John Walsh and V.J. Pregilo, Urban Cooperative Education Programs and Follow-up Study. Executive Summary. (San Francisco: Olympus Research Centers, 1976) p. 31.

As further perceived by the respondents, areas of weaknesses of the special cooperative program model included areas for the provision of in-service education to both teachers and employers.[1]

THE ROLE OF VOCATIONAL GUIDANCE AND COUNSELING IN COOPERATIVE VOCATIONAL EDUCATION

The relationship of the school guidance counselor to the teacher-coordinator in any of the vocational education programs becomes a critical factor to the success of a Cooperative Vocational Education program. In describing some of the numerous responsibilities of the Vocational Guidance Counselor in relation to CVE, the 1976 Educational Amendments indicate that grant money going to the states will be used in part:

> ...to support programs for vocational development guidance and counseling programs and services which...shall include
> (1) initiation, implementation, and improvement of high quality, vocational guidance and counseling programs and activities;
> (2) vocational counseling for children, youth, and adults leading to a greater understanding of educational and vocational options;
> (3) provision of educational and job placement....[2]

Campbell's study on the role of secondary schools in the preparation of youth for employment indicated that school guidance counselors have a great variety of assignments given them by administrators and just 40% of their time is spent in guidance counseling. Campbell

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[1]Maude Perkins Goldston, "An Evaluation of the Special Cooperative Vocational Education for Disadvantaged Students in Virginia," (Virginia Polytechnic Institute and State University, 1978).

[2]U.S. Congress, Educational Amendments of 1976, Public Law 94-482, 94th Congress, (Washington, D.C.: U.S. Government Printing Office, 1976) Section 134.

further states that without appropriate goals being set by administrators there is little chance in the future that the guidance counselor can assume the role of giving more than lip service to the needs of students who wish to enroll or who are enrolled in vocational education programs.[1]

Kaufman's study drew similar results to the Campbell study by indicating that:

Apparent weaknesses in the aims and objectives of guidance programs were:

a. Lack of provision for disseminating labor market information.

b. Lack of provision for concerted effort to assist youth to achieve desirable goals.

c. Failure to provide for adequate dissemination of occupational information.

Kaufman further noted:

> In regard to counseling staff, the major weakness noted was the general lack of occupational experience outside their (counselor's) field. ....
>
> It was consistently found that most of the guidance people were college-oriented and that they depended on the student to take the initiative in seeking information in order to make a vocational choice.[2]

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[1]Robert E. Campbell, Vocational Guidance in Secondary Education, a publication of the National Center for Vocational and Technical Education, The Ohio State University. (Columbus, Ohio: The Ohio State University, 1968), pp. 99-100.

[2]Jacob Kaufman, The Role of the Secondary Schools in the Preparation of Youth for Employment, Institute for Research on Human Resources, Pennsylvania State University, University Park, Pennsylvania, February, 1967.

Cohen and Frankel concluded a national study in 1973 on School Supervised Work Education Programs and one of their findings concluded that:

The counseling components of all types of programs were relatively ineffective and did not contribute significantly in any manner to student success. This study also found that careful matching of students to jobs, results in satisfied employers and students..... In the dropout prevention programs in particular, it is fairly common to find students working in jobs in which they have little interest and for which they are overqualified from a cognitive standpoint.

Relating to the need for students who are preparing for part-time employment as part of their vocational training Cohen and Frankel indicated that

> "To increase the effectiveness of counseling components, it should be required that students be given vocational interest and aptitude tests before entering any work education program, and have a chance to discuss their test results with a qualified person before being assigned to their first work station.[1]

In an attempt to further define the role of the guidance and placement service and to coordinate the cooperative vocational education method with that role, Wallace indicated that the future pattern for counselors will be the identification rather than the selection of the students.[2]

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[1]Allan J. Cohen and Steven M. Frankel, Executive Summary, An assessment of school-supervised work education programs. (System Development Cooperation: Santa Monica, California, 1973) p. 19.

[2]Harold R. Wallace. Review and Synthesis of Research on Cooperative Vocational Education, ERIC Clearinghouse on Vocational and Technical Education, The Center for Vocational and Technical Education, (Columbus, Ohio: The Ohio State University, 1970)

Billings concluded that students were more enthusiastic toward Cooperative Vocational Education programs than other forms of work experience because they had already selected a career in which they could channel their interests. Cooperative Vocational Education provided the avenue in which they could apply these skills.

He further states:

> The student's initial exposure to occupations should be to all the broad fields, and, later, exploration in depth of careers which are of interest. The cooperative training will be more beneficial when the student is able to participate in planning the training he needs to achieve his goals.[1]

Butler and York noted:

> Although the primary responsibility of enrollment, placement, and follow-up usually rests with the teacher-coordinator, there should be open lines of communication with all of these potential sources of assistance in order to optimize the opportunities and career development of students. Of particular importance is the teacher-coordinator's relationship with the guidance counselor.[2]

In support of the importance of good relationships between counselors and teacher-coordinator, Huffman's study indicated certain services that should be included:

> Effective Counseling. The guidance counselor and the teacher-coordinator should help each student to recognize his or her special interests and aptitudes through an interpretation of school records, test profiles, home background, and other information that may be available.
>
> Selection of Students. The teacher-coordinator should work closely with the guidance counselor in the selection of students

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[1] Billings, Donn. "Cooperative Occupational Education Programs: A Conference Seminar to Extend the Range of Vocational Education", New York, New York: The City University of New York, 1970.

[2] Roy L. Butler and Edwin G. York, What State Leaders Should Know about Cooperative Vocational Education, a publication of the National Center for Vocational and Technical Education, The Ohio State University. (Columbus, Ohio: The Ohio State University, 1971).

who meet certain requirements agreed upon by the school and the employers. Consideration for selection criteria should logically include the student's age, willingness, ability, and readiness for the program.

Enrollment Procedure. The enrollment procudure should be well defined and understood by all concerned. School personnel and the employer-sponsor should know the factors which determine student selection and placement in training stations.

Parental Approval and Support. The teacher-coordinator should confer with parents about the factors relating to vocational choice and career planning.

Periodic Counseling. The teacher-coordinator should counsel periodically with the students concerning (a) career objectives, (b) achievement in relation to aptitude and ability, (c) personal and social adjustment, and (d) job performance record.

Job Placement. The teacher-coordinator should maintain a current file on job opportunities available to graduates and help them obtain employment.

Follow-up. The teacher-coordinator should maintain a follow-up file of the graduates from the Cooperative Vocational Education Program.[1]

ROLE OF THE TEACHER-COORDINATOR

The teacher-coordinator has been identified as a "director of learning."

In identifying the critical incidents to determine which requirements were critical for the performance of secondary school distributive education teacher-coordinators, Sampson summarized his findings by stating:

1. The teacher-coordinator is adept at conducting the classroom and functions effectively with groups within the school and community.

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[1]Harry Huffman, "Guidelines for Cooperative Education and Selected Materials" from the National Seminar held August 1-5, 1966, A Manual for the Further Development of Cooperative Education. (Columbus, Ohio: Center for Vocational and Technical Education, Ohio State University, 1967.) 245 pp. (ED 011 044)

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2. The teacher-coordinator understands current policy, makes it known to appropriate people, and communicates information and ideas effectively.

3. The teacher-coordinator shows respect for students and is highly committed to their individual growth, both in personal development and in occupational understanding.

4. The teacher-coordinator is firm, logical, and consistent in behavior.

5. The teacher-coordinator is well organized and concentrates teaching effort on the subject matter under study.

6. The teacher-coordinator uses a variety of techniques in teaching and operating the distributive education program.[1]

Harris conducted a study of office education teacher-coordinators and sought to identify (1) the effective and ineffective critical requirements for office education teacher-coordinators; (2) the interaction of effective and ineffective behaviors with office education teacher-coordinators, programs, and community characteristics; and (3) the reasoned judgement reactions of office education teacher-coordinators concerning selected issues relative to the operation of the secondary school cooperative program. He concluded:

1. The critical requirements for effective and ineffective job performance of secondary school office education teacher-coordinators can be determined by analyzing appropriate data supplied by competent observers.

2. Experienced office education teacher-coordinators were able to provide critical-incident reports that were more comprehensive and insightful than those supplied by supervising school administrators.

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[1]Harland E. Samson, "Critical Requirements for Distributive Education Teacher-Coordinators," (a summary of a Ph.D. Dissertation completed at the University of Minnesota, 1964), The Delta Pi Epsilon Journal, VIII (August, 1966), 1-2.

3. The behavioral data reported by each of the observer groups, the experienced office education coordinators and their supervising school administrators in Illinois, provided a basis for understanding the effective and ineffective behaviors of teacher-coordinators.

4. Supervising school administrators are as aware of the personal and professional relationships of the office education coordinators as they are of the selection of training stations and placement activities of the coordinators.

5. Office education teacher-coordinators are considerably more concerned with adjusting student training-station performance problems than with any other phase of their activity.

6. Office education teacher-coordinators are more successful in adjusting student problems than in any other phase of their job activity.

7. Student discipline and control is a job activity area of concern to office education teacher-coordinators. The highest percentage of coordinators reporting ineffective behaviors were in the area of discipline and control.

8. Most of the student performance problems dealt with by office education coordinators are concerned with errors and other misjudgements.

9. The critical requirements for the effective and ineffective performance of secondary school office education teacher-coordinators are related to a large extent to adjusting student training-station performance problems, to a lesser extent to selection of training stations and placement activities, personal and professional relationships, adjusting student problems, and development and promotion of the program.

10. The behavior patterns of individual office education teacher-coordinators were not significantly different from one another....

11. The critical requirements provide a basis for insight into the job activities of office education teacher-coordinators which can be used to design the preservice and inservice education programs for teacher-coordinators.[1]

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[1] E. Edward Harris, "Office Education and Distributive Education Teacher-Coordinators: Critical Requirements and Reasoned-Judgment Comparisons" (unpublished Ed.D. dissertation, Northern Illinois University, 1965), pp. 369-371.

The Walsh study conducted for the United States Office of Education identified the following responsibilities of the typical teacher-coordinator:

1. In-school promotion and recruitment.
2. Selection of students
3. Preparation of curricula
4. Teaching of cooperative classes
5. Job development and employee relations
6. Referrals of students to jobs
7. Inspecting work sites and observation
8. Counseling of students
9. Grading of students
10. Placement
11. Self evaluation[1]

The Mitchell study found in business education that the following tasks were critical to the success of the cooperative office education teacher:

* 15% clerical and program management tasks
* 14% youth leadership activities
* 14% out-of-class coordination activities
* 9% teaching lessons
* 9% selecting and placing students

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[1]John Walsh and Vincent J. Breglio, An Assessment of School Supervised Work Education Programs Part II, Urban Cooperative Education Programs and Follow-up Study, Executive Summary, (San Francisco: Olympus Research Centers, 1976), pp. 12-13.

* 8% testing and evaluating students
* 8% planning and developing lessons
* 7% guidance and counseling
* 6% program publicity
* 5% administrative duty assignment, and
* 5% professional development[1]

In a study prepared for the U.S. Office of Education by Cotrell, it was determined that certain pedagogical performance requirements were common to all program areas for teacher-coordinators at the secondary level. Cotrell drew the following conclusions:

1. Performance requirements tended to be the same for teacher-coordinators from the six secondary cooperative vocational education programs represented in the study.

2. No support was found in this study for projecting specialized professional education curricular offerings for each of the cooperative vocational programs represented.

3. A performance base was generated for the development of teacher education curricular offerings, certification requirements, and evaluation systems for teacher educators and secondary level teacher-coordinators in Cooperative Vocational Education programs (see Appendix for a summary of Cotrell's ratings).[2]

Inservice education for teacher-coordinators was addressed by Roth. He sought to provide state and local professional development personnel with planning data pertinent to in-service needs for teacher-

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[1]Michael K. Mitchell, "Tasks Performed by Vocational Cooperative Teachers in Secondary Schools of Texas Considering Time Spent, Importance, Use of Teacher Aides, and Implications for Curriculum Development." (Doctoral dissertation, Texas A&M University, 1978)

[2]Calvin J. Cotrell and others, Model Curricula for Vocational and Technical Teacher Education: Report No. III, Performance Requirements for Teacher-Coordinators. Final Report. (Columbus: The Center for Vocational and Technical Education, The Ohio State University, 1972), p.22.

coordinators of Cooperative Vocational Education programs in the State of Illinois.

In interviews with 294 teacher-coordinators Roth found that the top four in-service education needs expressed by the teachers were to:

1. Correlate classroom instruction with on-the-job training
2. Student placement
3. Student adjustment to the work environment
4. Improvement on the job learning environment.[1]

THE TRAINING SPONSOR

In a determination of what employers are seeking when hiring new employees Lee found that:

> Key words that employers often use in describing workers include "initiative," "attitude," "loyalty," "enthusiasm," "dependability," "ability to listen and carry out instruction," "cheerfulness," "reliability," and a "willingness to learn." Youths who do not have the positive traits associated with these terms will often have difficulty in successful work entry.[2]

Clarens stated:

> Employers seldom express dissatisfaction with occupationsl skills beginning workers bring to their jobs, but they are forever reminding vocational teachers they must turn out beginning workers who have "good" attitudes and the motivation to work... The vocational educator may be very confident in teaching the skills of the occupation or the "how to's" in his vocational field

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[1]Gene Leon Roth, "In-service Education Preferences of Illinois Cooperative Vocational Education Teacher-coordinators", (Carbondale, Southern Illinois University, 1978).

[2]J. S. Lee, Youth: Work Entries through Vocational Education, (Yearbook #6, American Vocational Association, Washington, D.C., 1976) p. 189.

but have great difficulty in developing the kinds of attitudes and values employers expect when young workers begin their first jobs.[1]

Eight hundred ninety-seven employers participated in the Battelle Study to determine the cost-effectiveness of cooperative vocational programs. Their results show a definitely favorable attitude on the part of the employers toward the graduates of cooperative programs. The responses favoring cooperative graduates was 58.6 percent versus 4.2 percent for non-cooperative graduates, with 36.6 percent indicating no significant difference. Results of the employer survey six months after employment for the cooperative graduate versus the non-cooperative graduate showed that 60.5 percent of the employers favored the cooperative while 2.8 percent favored the non-cooperative graduate with 35.6 percent showing no difference.[2]

Hayes and Travis in analyzing employers' perceptions of the costs and benefits of the cooperative program found from interviews of 70 private sector employers that:

> 77% of the 60 respondent employers termed their experience in recruiting new cooperative education students as either "excellent" or "good-very good."[3]

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[1] M. K. Claurnes, Developing Values and Attitudes in Vocational Education, (Washington, D.C., Yearbook #2, American Vocational Association, 1972), p. 130.

[2] Daniel E. Molnar, Cost Effectiveness of Selected Cooperative Vocational Education Programs as Compared with Vocational Programs without a Cooperative Component, (Columbus, Battelle Laboratories, 1973) pp. 97-103.

[3] Richard A. Hayes and Jill H. Travis, "Employer Experience with the Recruitment of Cooperative Education Employees, An Analysis of Costs and Benefits", The Journal of Cooperative Education, Vol. XIII, No. 1, November, 1976.

Eisen in his study of office workers found in response to his questionnaire to 140 responding businesspersons that:

> 97.1 percent believed the cooperative office work experience program was a valuable one in preparing students for careers in an office. There were 94.2 percent of the businesspersons who said they were happy to have a part in attracting and helping to train young people for careers in offices....As reported by 47.4 percent of the businesspersons, cooperative office work experience students advanced faster than others of the same age. Almost 40 percent of the businesspersons stated that cooperative students were more mature than other high school students.[1]

One significant finding in Cohen's study concerning the employers' point of view relating to Cooperative Vocational Education was that the purpose of the cooperative program had very little impact on their attitude toward the program, due in part, perhaps to the employer having never received orientation regarding the different purposes of various work education program configurations.[2]

Cohen also found in his study that:

> Employers feel that they are getting their money's worth out of their student workers and are contributing to their occupation.

CHARACTERISTICS OF THE STUDENT LEARNER

Wallace indicates that in the majority of studies produced in the sixties, two things became obvious:

> 1. The Great Majority of studies are concerned with how the student feels about something--his values, aspirations, perceptions, concerns, etc.

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[1]Norman Eisen, "Work Experience in California" (unpulbished Doctor's dissertation, University of Southern California, 1966).

[2]Alan J. Cohen and Steven M. Frankel, An Assessment of School-Supervised Work Education Programs, (Santa Monica, System Development Corporation, 1973)

2. It is obvious that much of the research is generated and conducted in comparative isolation, without reference to a larger theoretical framework.[1]

Several studies relating to the student's "self concept" as it applies to Vocational Education are worthy of note here. Warmhoff conducted a study which is an extension of Brookover's relating to the basic concepts of a theory of occupational choice.

In reviewing Warmhoff's study, Wallace indicates

> "A basic premise in the Warmhoff study is that the self concept of vocational ability is not a remote psychological construct. It is, in effect, whatever the students might feel about themselves and it is assumed that the student is fully aware of and able to accurately report what his or her self concept is.
>
> ....Some of the findings reported by Warmhoff led him to conclude that there was a "substantial relationship" between the students' self concepts and their perceptions of how others would evaluate their potential for success in high status occupations".[2]

A number of studies have concentrated on the area of work adjustment. Golden said the: "vocational satisfaction is a function of the correspondence between the reinforcers in the work environment and the individual's vocational needs."[3] Golden confirmed a premise that if workers find personal satisfaction in their employment, they will enjoy their work.

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[1]Harold R. Wallace, Review and Synthesis of Research on Cooperative Vocational Education (Columbus: The National Center for Vocational and Technical Education, The Ohio State University, 1970), pp. 13-14.

[2]Ibid, pp. 15, 16.

[3]Robert Golden and David J. Weiss, Relationship of Vocational Satisfaction to the Correspondence of Job Reinforcement and Vocational Needs. Work adjustment project (Minneapolis, University of Minnesota, 1968).

Klaurens sought to determine what factors in the work experiences of students were associated with job satisfaction. As a result of her study, Klaurens recommended the following:

1. Criteria for selection of training stations should include evaluation of potential satisfactions in training positions.

2. Planned experiences on the job should provide opportunities for student trainees to experience psychological growth through work activities that challenge their abilities.

3. Student trainees should receive their initial training experience in positions where supervisors and co-workers are suitable role models and are individuals with whom the student trainees can interact.

4. Student trainees should enter the initial job with basic skills and some specialized competencies which will prevent them from experiencing failure and equip them to experience achievement, recognition, and responsibility in their training.

5. Student trainees should have learning experiences which help them to be tolerant of the needs, values, and personal characteristics of co-workers, supervisors, and customers.[1]

Cohen and Frankel sought to find the answer to two questions concerning Cooperative Vocational Education relating to job satisfaction. Students were asked a series of 34 questions about the characteristics of their job and their attitude toward it.

Sixteen of these items relating directly to the student's satisfaction with his job were combined into a single job satisfaction score. The following are three examples of the specific items used: "Would you do this job as a volunteer?"; "Do you often wish you didn't have to go to work?"; and "Does your boss tell you when you do a good job?". The score was derived by computing the percentage of a student's total responses

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[1]Mary K. Klaurens, "The Underlying Sources of Job Satisfaction of Distributive Education Student-Trainees" (Doctoral dissertation, Minneapolis, University of Minnesota, 1967).

that indicated satisfaction with his job. Thus the score could range from 0 to 100, and the mean scores for total sample of participating students was 66.7.[1]

Cohen and Frankel also asked students who were enrolled in cooperative programs whether or not they felt that they could recommend to a friend that they enter the cooperative program. Ninety-four percent of the students responded that they would recommend the cooperative program.

Walsh's study comparing 168 students enrolled in cooperative programs versus 451 students who were working but not enrolled in cooperative programs found that students enrolled in cooperative education programs rated higher in the areas of job satisfaction, job responsibility, school satisfaction, and a likelihood of recommending cooperative programs to friends. Cohen and Frankel also found that nonparticipants of cooperative programs rated the overall quality of their jobs higher than participants of cooperative programs and that the non-participants rated training and supervision on the job equal to participants.[2]

FOLLOW-UP OF GRADUATES

A number of comparative follow-up studies have been conducted on a local or state basis to determine the effectiveness of Cooperative

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[1]Alan J. Cohen and Steven M. Frankel, An Assessment of School-Supervised Work Education Programs, (Santa Monica, System Development Cooperation, 1973), p. II-4.

[2]John Walsh and Vincent J. Breglio, An Assessment of School Supervised Work Education Programs, Part II: Urban Cooperative Education Programs and Follow-up Study, Executive Summary (San Francisco, California, Olympus Research Centers, 1976) p. 9.

Vocational Education programs. An important part of the follow-up studies has been to determine how well high school graduates of cooperative programs have fared in the labor market.

Robertson's study consisted of a follow-up of 121 graduates who had no formal education beyond high school. Seventy of the graduates had not been involved in cooperative programs at the high school, 51 students were involved as Cooperative Vocational Education students. One of Robertson's findings was that:

> Of those employees who had participated in the cooperative education program while in high school, 58.82 percent of them began work immediately after graduation compared with 34.28 percent of the non-cooperative group.[1]

In the Molner study conducted for Battelle, 12 school districts, covering three states, were surveyed. Molner found that:

> Co-op graduates tend to find full-time employment an average of 1.5 weeks sooner than non-co-op graduates which is a statistically significant difference, but not a practical difference.[2]

Wilkinson found in comparing cooperative distributive education graduates with non-cooperative distributive education graduates on selected employment factors that students enrolled in cooperative programs obtained jobs faster than the non-co-op student.[3]

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[1]Leonard F. Robertson, "An Exploratory Study of the Effects of Cooperative Education Programs in Beginning Occupations of Selected Employment Factors" (unpublished Doctor's dissertation, Colorado State College, 1965).

[2]Daniel E. Molner and others, Cost Effectiveness of Selected Cooperative Vocational Education Programs as Compared with Vocational Programs without a Cooperative Component (Columbus, Battelle Laboratories, 1973) p. 95.

[3]Donald R. Wilkinson, "A Comparison Study of Cooperative Distributive Education Graduates with Non-cooperative Distributive Education Graduates on Selected Employment Factors in the State of Iowa" (unpublished Doctor's dissertation, 1974).

In the Haines and Coleman Study, 3,932 Michigan high school students were surveyed ten months after graduation to check their status in the labor market. This study was not a comparative study. All students contacted had been involved in Cooperative Vocational Education programs at the time of graduation. The following pertinent information comes from this study:

1. Cooperative trainees fare well in the labor market.

2. Employment is obtained quickly and residual unemployment is low.

3. Trainees are shown to be representative of all levels of academic achievement, and as a total group are superior to their graduating classes as a whole.

4. Large numbers of trainees are still working for the employer who trained them.

5. About one-fifth of the trainees had entered college.

6. Cooperative Education does indeed result in trained employees.[1]

In Walsh's comparative follow-up study, 280 participating students in cooperative programs and 302 non-participating students completed interviews with the following findings:

> The follow-up study indicates that although the attitudes of high school work education participants were much more positive than non-participants while they were in school, two years later little difference was found between the two groups. Furthermore, the outcomes for high school participants, in terms of current employment status, past year employment stability, wage levels, and job satisfaction, were about the same as those for non-participants

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[1]Peter G. Haines and Brendan G. Coleman, "How High School Cooperative Trainees Fare in the Labor Market," National Business Education Quarterly, XXXIII (October, 1964), 23-24.

--even though the first jobs obtained by participants paid higher wages than those obtained by non-participants.[1]

COOPERATIVE VOCATIONAL EDUCATION AND THE NON-PROFIT PRIVATE SCHOOL

In the educational amendments of 1976 provision was made under section 123, Cooperative Vocational Education:

> To the extent consistent with the number of students enrolled in nonprofit private schools in the area to be served, whose educational needs are of the type which the program or project involved is to meet, provision has been made for the participation of such students;[1]

Only one major study has evaluated what has taken place since the 1976 Amendments. Wasdyke found that the development of cooperative relationships between private and public schools is impeded by several barriers including:

* The lack of federal, state, and local levels of accurate basic data on private schools and their students

* The absence of data on the extent and nature of private student participation in programs funded under the vocational education amendments of 1976

* Poorly developed communications networds among nonprofit private institutions and between private and public elements and secondary institutions

* Mistrust, misperceptions, negative stereotypes, and philosophical differences on the part of both private and public

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[1] John Walsh and Vincent J. Breglio, An Assessment of School Supervised Work Education Programs - Part II: Urban Cooperative Education Programs and Follow-up Study, Executive Summary, (San Francisco, Olympus Research Centers, 1976) p. 36.

[2] U.S. Congress, Title I, Amendments to the Vocational Education Act of 1963, Public Law 94-482, (Washington, D.C.: U.S. Government Printing Office, 1967). p. 2190.

school officials about the roles of the two kinds of institutions in American society

* State prohibitions, policies, and regulations that discourage and restrict federal assistance to private school students.....[1]

Wasdyke concluded that a more cooperative relationship between private and public schools should exist. Joint planning at all levels should begin to take place according to Wasdyke.

COMPARATIVE STUDIES

A number of studies have been conducted to determine if significant relationships exist between success criteria and potential predicators of program success of students enrolled in Cooperative Vocational Education as against vocational students not enrolled in Cooperative Vocational Education. One of the studies reviewed has used identically the same success criteria as a base for the study. A composite list of success criteria for this study include academic achievement, dropout rate for senior students, work values, job satisfaction, employer comparison of the Cooperative Vocational Education versus noncooperative vocational student, and follow-up.

Concerning academic achievement relating to successful criteria used in Cooperative Vocational Education, Mills reviewed 85 high schools in 28 states in the area of Distributive Education. He found that the participants in Cooperative Vocational Education showed a greater

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[1] Raymond G. Wasdyke, Providing Students in Nonprofit Schools with Access to Publicly Supported Vocational Education Programs, (Princeton, Educational Testing Service, Final Report to Department of HEW, 1980) pp. 59-61.

tendency to complete high school than did vocational students not involved in cooperative education.

> ....mental maturity scores and class rank of coop students was low with more than 70 percent in the lower half of their graduating classes; achievement of the coop students compared favorably with their abilities as reflected in their mental maturity scores.

Mills suggests that the above information refutes the charge that students enrolled in Cooperative Vocational Education are prevented from opportunities in receiving a sufficient program of basic general education.[1]

Bledsoe completed a similar study comparing the educational development of diversified cooperative education students versus vocational students not included in cooperative programs. There were no statistically significant differences between the experimental and control groups.[2]

Harper in his study of special education relating to work study programs compared dropouts with continuing students in work-study programs. He studied the characteristics of students with reference to in-school adjustment, post-school adjustment, and vocational success. Dropout students showed less desirable characteristics than the continuing students. Continuing students were found to be more employable than the dropout students. The employers found no

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[1]Chester O. Mills, "Academic Status of High School Distributive Education Cooperative Students." (Doctoral Study. The Ohio State University, 1963.) DA. 24:2759. pp. 14, 30.

[2]Harry J. Bledsoe, "A Comparison of the Educational Development of Diversified Cooperative Education Students and Non-Diversified Cooperative Education Students in Selected Indiana High Schools." (Doctoral Study. Purdue University, 1968.) D.A. 29:756-A. pp. 12, 30.

appreciable difference bewteen the dropout student and the work study student in overall job ratings. The continuing student made significantly more successful social adjustment and was found to have a higher vocational competence than his counterpart who had dropped from the program.[1]

Wallace draws a comparison to Borows' suggestion that Cooperative Vocational Education should be used to assist all students in the development of this "work ethos."[2]

In an extensive research study conducted by Bruce Bernstein in 1968, a comparison of work values, using Super's work values inventory, was summarized by Wallace.

> For the most part there was little evidence of any work value differences between the co-op and the control students. Correlations between the work values and academic achievement, personal adjustment, and job performance were generally low. Nonetheless there were sufficient findings to encourage further research in the area of work values and to indicate that the study of work values might be a meaningful approach to understanding the vocational development of disadvantaged youth.[3]

In a comparative national study conducted by Cohen and Frankel it was found that a cooperative education program was more likely than any other work experience program to:

> - Provide students with jobs that afford a high degree of satisfaction

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[1]Dale H. Harper. "A Comparison of Drop-Outs and Continuing Students in Special Education Work-Study Programs for the Mentally Handicapped in Public Secondary Schools. (Doctoral Study, Colorado State College, 1968.) D.A. 29:1039-A. pp. 13, 30.

[2]Harold R. Wallace. Review and Synthesis of Research on Cooperative Vocational Education. The Center for Vocational and Technical Education. (Columbus, Ohio: The Ohio State University, 1970)

[3]Bruce H. Bernstein. "A Study of the Work Values of a Group of Disadvantaged High School Boys in a Co-operative Education Program." (Doctoral Study, New York University, 1968.)

- Help students in deciding on an occupation
- Provide students with jobs that fit into their career plans
- Provide students with a high level of responsibility.[1]

The Battelle study indicated that the school dropout rate for non-co-op students was twice as high as students enrolled in cooperative vocational education.

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[1] Alan J. Cohen and Steven M. Frankel, An Assessment of School-supervised Work Education Programs, (Santa Monica, System Development Corporation, 1973.)

CHAPTER III

METHODOLOGY

This chapter deals with the methods used in the selection of the sample for the study, preparation and supervised administration of the instruments, an analysis of the results of the survey, and, finally, a summary of the chapter.

PURPOSE OF THE STUDY

The purpose of this study was to (1) determine the degree to which secondary cooperative vocational education is a viable training educational method of instruction, (2) assess the degree of priority given by states to the 1976 educational amendments where special instruction is given...to areas that have high rates of school dropouts and youth unemployment, as well as high priority to program instruction in the areas of handicapped and disadvantaged, (3) evaluate existing programs in all vocational program areas to determine successful program components of the cooperative method of instruction, and (4) locate "Models" of CVE programs across the country at the secondary level for those wishing to develop strong CVE programs.

There was no attempt to compare Cooperative Vocational Education against other forms of work experience. The study was descriptive in nature.

SELECTION OF JURY

Because the study was undertaken on a national level, it was determined that the selection of a jury of recognized experts in the

field of Cooperative Vocational Education could best select, with given criteria, those states that were most closely following Cooperative Vocational Education program guidelines as originally established under the 1968 Congressional Amendments. Twelve individuals with unique backgrounds with high visability in cooperative education along with individuals from the United States Office of Education, Vocational and Adult Division, were selected to form the jury (see appendix G for listing of jury members).

Each individual selected for consideration as a jury member was contacted by phone in early November, 1980 to solicit his or her assistance in the selection process for the states to be considered for use in the study. Each individual responded in the affirmative to serving as a member of the jury.

On November 22, 1980 a letter along with criteria to be used in the selection process was sent to each member of the jury. Within four weeks all jury members had responded to the letter (see appendix E for letter and form used).

Responses from members of the jury were received listing in rank order the states for consideration in the study. A simple tabulation indicated those states that would be used in the study.

STATES SELECTED FOR PARTICIPATION

The states selected for participation in the study were Arizona, Minnesota, Ohio, Oklahoma, and Virginia.

Introductory phone calls were made in January, 1981 to the State Director of Cooperative Education in each of the states mentioned

above to verify his or her interest in participating in the study. A follow-up letter was sent to each state director explaining in greater detail the purpose of the study and the part that he or she would be requested to play should the director agree to be a part of the study. After receiving clearance from the vocational director, or higher authority, each of the five states contacted agreed to participate according to the procedures that were indicated in the follow-up letter (see appendix C for the follow-up letter).

SELECTION OF THE SAMPLE

Upon the selection of the five states to be used in the study, the State Cooperative Director was asked to select five large, five medium, and five small school districts and high schools within those districts who could participate in the study. A total of 80 high schools were then recommended for participation in the study by the State Cooperative Directors and by program specialists in the five states from the list of school districts. Teacher-coordinators were recommended for participation in the study by state department personnel on the basis of having strong Cooperative Vocational Education programs. All vocational program areas were asked to be represented equally in each state insofar as possible. Also, where possible, each state was requested to make school selections that geographically covered the state. Training sponsors and co-op students participating in the study were recommended by the teacher-coordinators. The teacher-coordinators had received prior instructions on the process used for their selection.

DEVELOPMENT OF INSTRUMENTS FOR THE COLLECTION AND RECORDING OF DATA

Data Collection, Teacher-Coordinator Questionnaire

In the literature review care was taken to focus on survey instruments that were developed for similar studies on cooperative education. Federal legislation spelling out the criteria for development of cooperative vocational education programs also became the basis for questionnaire development in the case of the teacher-coordinator questionnaire. The draft of the teacher-coordinator questionnaire was presented to three competent individuals in the field of Cooperative Vocational Education and one expert in research design for constructive criticism. After reviewing their comments, appropriate revisions were made in the instrument for use in the study. The questionnaire was then administered to a sample group of Cooperative Vocational Education Teacher-Coordinators in the Jordan and Salt Lake School Districts in the State of Utah for the specific purpose of gaining further validation of the instrument. The purpose of this sampling was:

* To determine whether the directions to the questionnaire were clear and precise
* To determine whether the questions were clear and precise
* To determine if the questions would solicit appropriate responses of value to the study.

Data Collection, Participating Student Questionnaire and Training Sponsor Questionniare

After determining specific objectives to be achieved by both the participating student and the training sponsor questionnaire, it was decided that two questionnaires used by System Development Corporation

of Santa Monica, California in their 1973 national study could be employed satisfactorily with minor modifications to obtain some of the responses needed in the collection of data for these two groups.

ADMINISTRATION OF THE SURVEY INSTRUMENTS

When the decision was made to use a survey instrument in the study it was recognized that several methods could be used to gain responses from the instruments used. It was determined that although the method which was selected would add additional costs to the study, the benefits would be superior to the other options available.

In a letter addressed to each of the five state directors of cooperative education participating in the study the following requests were made:

1. Please select an individual or individuals that can conduct a survey with teacher-coordinators in five small, five medium, and five large school districts, keeping in mind the importance of covering as many vocational areas as possible in the selection of the teacher-coordinators who will participate in the study.

2. Each teacher-coordinator will be asked to select at random, two twelfth grade students and two training sponsors presently participating in the cooperative program. The teacher-coordinator will be asked to supervise the completion of a survey instrument to each of the students and training sponsors as selected by them.

3. It will be necessary for me to come to a location designated by you to meet with those you would approve to assist with the study. The purpose of this trip will be to give inservice training to those who will visit onsight with teacher-coordinators in the administration of the questionnaire. It is anticipated that this inservice meeting would take approximately two hours. In trying to coordinate the dates in which I will be in all five states to conduct the inservice training of the interviewers, dates have been selected

that I hope will meet your schedule. One or two alternate dates have been suggested that might be considered as well. At this time please consider the date of Thursday, March 26 as the first date in which I would be at the place designated by you to work with the interviewers and alternate dates of April 1 and 2.

4. It is requested that the interviewers complete their interviews with the teacher-coordinators on or before the twentieth of April and then to have the questionnaires returned immediately to this office for tabulation. Each of the other four states will be meeting similar dates for completion in order for the tabulation of the results from each state to take place.

5. Please select the schools and teacher-coordinators and have the names of the school and list of coordinators returned to this office by Tuesday, March 3. By that date it would be appreciated if you could have confirmed the best date to meet with your interviewers of the dates suggested above.

Two additional letters accompanied the first letter sent to each state cooperative director referred to above. They included:

1. A letter of instruction to those conducting the interview with the teacher-coordinators.

2. A letter of information about the study and instructions to the teacher-coordinator on the procedures to be used in completing the questionnaire.

After receiving the list of schools and names of teacher-coordinators participating in the study from each state, a phone call was made to confirm the dates for the project director to meet with each state staff for inservice instruction on the administration of the survey instrument. A set procedure was followed in the visits to each state by the project director. A one hour meeting was held with the state cooperative director to review in detail all procedures of the study. This was followed by a three hour inservice meeting with those program specialists who would be meeting directly with the teacher-coordinators taking part in the study. Upon completion of

the interview with the teacher-coordinator, the program specialist was asked to return the questionnarie to the project director in a self-addressed, postage metered envelope. The teacher-coordinator's role was then reviewed in detail and the request was made that each teacher-coordinator assist in selecting two co-op students and two training sponsors for participation in the study. Each teacher-coordinator was asked to hand carry a student questionnaire to two students presently enrolled in the Cooperative Vocational Education program at their school and to return the student questionnaire in a self-addressed, postage paid envelope. Each teacher coordinator was also asked to hand carry a training sponsor questionnaire to two current training sponsors. Self-addressed, postage paid envelopes were again provided and the questionnaires were to be sent directly to the project director upon completion by the students and training sponsors.

Each state staff member was encouraged to have all teacher-coordinator questionnaires completed and returned to the project director within three weeks of the time of the inservice meeting in that particular state. State staff members were asked to encourage teacher-coordinators to have all student and training sponsor survey instruments returned within two weeks from the time of their interview with a member of the state staff.

ANALYSIS OF RESULTS

Inservice visits to state staffs took place during the months of March and April, 1981. Follow-up calls were made to three of the

five state cooperative directors to determine if there were any questions that needed clarifying. No other follow-up was done.

Total responses from the three questionnaires from each state were above expectation as indicated in tables 1 and 2 located in Chapter 4.

All questionnaries in each of the three areas as received were considered eligible for use in the study. Some individuals in each area did not complete every question; however, the number of questions not responded to by any one individual was insignificant.

The questionnaire responses in each area, teacher-coordinator, student, and training sponsor were used to identify existing conditions, practices and procedures used in the administration of Cooperative Vocational Education programs at the local high schools in each of the five states.

Number, percentages, means, modes, ranges, standard deviations, and median were determined and computed. Tables were constructed to present the data so they would illustrate the patterns from each set of questionnaires as they emerged. In some instances an analysis of variance was used for additional data clarification.

SUMMARY OF CHAPTER

A jury of recognized experts in the area of Cooperative Vocational Education assisted in the selection of five states across the country considered to have superior Cooperative Vocational Education programs.

State directors of cooperative education were contacted in each of the five states for participation in the national study. The directors were asked to select 15 high schools within their state that

had "model" Cooperative Vocational Education programs for participation in the study. Selection of programs for participation covered all vocational areas.

A total of eighty teacher-coordinators from 68 separate high schools in the five states participated in the study as well as 134 students from six vocational program areas and 126 training sponsors representing all vocational program areas in each of the five states.

The selection of teacher-coordinators was done by requesting state cooperative directors and state staff to select 15 cooperative programs considered superior in five large, five medium, and five small high schools (the state of Oklahoma requested an additional five participants which were included in the final totals).

The selection of training sponsors and students for participation was made by participating teacher-coordinators. They selected training sponsors and currently enrolled students in the cooperative program who were committed to the concepts of Cooperative Vocational Education.

A questionnarie return of 94% was received from participating teacher-coordinators with all questionnaires returned being used for the study.

A questionnaire return of 79% was received from training sponsors who participated in the study. All questionnaires in this group were used in the study.

Data received from the five states was then classified. Numbers, percentages. standard deviations, were determined and computed with appropriate table construction to present and illustrate emerging patterns of the study. Appropriate conclusions and recommendations were then established.

CHAPTER IV

FINDINGS AND RESULTS

The data presented in Chapter IV were drawn from responses received from three separate questionnaires taken to five separate states participating in the study. Seventy-five teacher-coordinators, one hundred thirty-four students and one hundred twenty-six training sponsors responded and completed questionnaires used in the study. Teacher-coordinators and students participating in the study represented each of the six vocational program areas.

Data from the study for this chapter were categorized in the following sequence:

1. Data from the teacher-coordinator questionnaire.
2. Data from the participating student questionnaire
3. Data from the training sponsor questionnaire.
4. Certain data from a combination of the three questionnaires.
5. Chapter summary.

Overall characteristics of study - Seventy-five teacher coordinators from 68 small, medium and large high schools in five states completed the questionnaire under supervision of an interviewer.

One hundred thirty-four Cooperative Vocational Education students and 126 training sponsors also participated in the study by completing a survey instrument. Members of the state office for Vocational Education in each of the five states participating in the study assisted with the sample selection and administration of the teacher-coordinator questionnaire.

Teacher-coordinators then assisted with the sample selection of students and training sponsors participating in the study.

Characteristics of the teacher-coordinator questionnaire - at the beginning of the questionnaire, commonly used definitions for Cooperative Vocational Programs were given for clarification as the teacher-coordinator completed the questionnaire. The purpose and use of the questionnaire was explained to the teacher-coordinator by the interviewer who took the instrument to the teacher-coordinator at his or her high school for completion.

Vocational program area of teacher coordinator - the first question in the instrument asked teacher-coordinators to indicate the vocational program area where they spent the majority of their teaching/coordinating time. Table 1 indicates that teacher-coordinators completing

TABLE 1.--Final status of participants in National Cooperative Vocational Education Study

N = 80	Questionnaires*							
	Teacher-coordinators		Students		Training sponsor		Total	
Participants	No.	%	No.	%	No.	%	No.	%
Completed questionnaire	75	94	134	83.8	126	79	335	84
Ineligible	2	2.4	6	3.7	4	2.4	12	3
No Response	3	3.6	20	12.5	30	18.6	53	13
Totals	80	100	160	100	169	100	400	100

*Cut-off date for receiving all questionnaries was May 13, 1981. Two teacher-coordinator questionnaires, 6 student and 4 training sponsor questionnaires arrived after this cut-off date and were not included in the totals for the study.

the questionnaire were representative of each of the six vocational program areas. However, the majority of those completing the questionnaire come from the program areas of Business and Office Education, Marketing and Distributive Education and Trade and Industrial Education.

High school size of participating teacher-coordinator - included in instructions given to state staff for selection of schools to be used in the study was the request to select small, medium, and large high schools. The small schools were those considered to have below 1000 students. Schools below 2000 in size were considered to be medium size and those schools above 2000 students were considered to be large high schools.

Table 2 shows the distribution of schools selected for use in the study by size of school, grades 10 through 12. Almost 50 percent of the

TABLE 2.--Number of schools, teacher-coordinators, students and training sponsors in the population by Strata*

Strata	Schools	Participants		
		Teacher Coordinators	Students	Training Sponsors
Large High Schools (3000 students or less)	27	27	54	54
Medium High Schools (2000 students or less)	31	31	62	62
Small High Schools (1000 students or less)	22	22	44	44
Totals	80	80	160	160

*Includes some schools, teachers, students, and training sponsors later determined ineligible.

high schools in the study were of medium size or with student bodies below 2000.

Length of time cooperative program has been in operation - The average number of years of operation for cooperative programs was 13 years (13.5 mean). Thirty-nine percent of the cooperative programs in this study were in existence ten years or less.

TABLE 3.--Number of years cooperative program has been operating within department
(Question 1)

N = 75	Teacher Responses	
Number of years	No.	%
1-10	29	39
11-20	36	48
21-30	7	9
31-45	3	4
Totals	75	100

Length of time that a teacher has served as a teacher-coordinator - The average length of time that a teacher had served as a teacher-coordinator was 8½ years. Over half of the 75 teachers had been coordinators for 9 years or more.

TABLE 4.-Length of time that teacher has served as a teacher-coordinator (Question 2)

N = 75	Teacher Responses	
Number of years	No.	%
1-5	24	32
6-10	27	36
11-15	17	23
16-25	7	9
Totals	75	100

The title of the person to whom the teacher-coordinator reports - Forty-six percent of the teacher-coordinators responded that they report directly to the principal when relating to Cooperative Vocational Education. The next most often listed person to whom teacher-coordinators reported was the department chairman-supervisor. (35 percent). The largest number of coordinators reported on their program activities in Cooperative Education to the Principal rather than the department chairman or person who is their line supervisor.

TABLE 5.--The title of the person to whom the teacher-coordinator reports
(Question 3)

N = 75	Teacher Responses	
Title	No.	%
Principal	33	46
Department chairman/supervisor	25	35
Vocational Director	10	14
Other	4	5
Total	72	100

Inservice classes on Cooperative Vocational Education - When asked to respond to the number of inservice classes or workshops on Cooperative Vocational Education attended during the last three years 69 percent of the teacher-coordinators indicated they had attended four or more. Only one of the 75 had attended no cooperative workshop or courses during the last three years.

TABLE 6.--Number of in-service classes attended during past three years.
(Question 5)

N = 75	Teacher Responses	
Number of classes	No.	%
Four or more	52	69
Three	13	17
Two	4	5
One	5	7
None	1	1
Total	75	100

When teacher-coordinators were asked to identify if they had attended classes or workshops where units of instruction on Cooperative Education were given, 72 percent indicated they had attended this type of workshop.

When asked, "To what extent have these classes been productive for you", 52 percent of the teacher-coordinators indicated that classes or workshops attended had been excellent while 5 percent reported in-service classes or workshop had been poor. Forty-two percent of the teachers responded that they had been "good".

Contractual procedures used by school districts for teacher-coordination - Table 7 indicates that sixty-three of the 75 teachers involved in the study responded concerning the way in which they are hired to coordinate cooperative programs. Ninety-one percent responding

TABLE 7.--How teacher-coordinators perform their coordination responsibilities
(Question 8)

N = 75	Teacher Responses*	
Procedures	No.	%
Coordinate as part of contract day. . . .	57	91
Coordinate on an extended day - beyond the regular day with no additional pay.	4	6
Coordinate on an extended day - beyond the regular day with additional pay.	2	3
Total	63	100

*Twelve coordinators did not respond to the question

indicated they perform their cooperative duties as part of the contract day. Just 2 teachers responded that they worked on an extended day with additional pay, and only 4 teachers indicated they were performing coordination responsibilities on an extended day without additional pay.

In Table 8 a state-by-state analysis of the kinds of activities and number of hours spent on coordination is shown.

TABLE 8.--Analysis of the kinds of activities and number of hours spent on coordinating each week
(Question 9)

Activity N = 40	AZ Mean Hours	MN Mean Hours	OH Mean Hours	OK Mean Hours	VA Mean Hours	Total Mean Hours	Total %
Providing training in classroom (related)	6	6	8	9	13	8	20
Visiting training sponsor	6	5	9	5	9	7	17.5
Keeping records and reporting activities	5	2	5	7	4	4	12.5
Contacting employers about job openings	3	1	3	4	4	3	7.5
Talking with students about cooperative program	2	2	2	3	3	3	7.5
Conducting follow-up of former students	.8	.5	1	3	1	1	2.5
Other cooperative related activities	6	5	5	4	5	5	12.5
Other non-related co-operative activities*	11.2	18.5	7	4	1	8	20
Totals	40	40	40	40	40	40	100

*Includes teaching non-coop classes and non-teaching assignments by administration

The two activities requiring the greatest amount of the teacher-coordinator's time are the teaching of the cooperative related class (8 hours average) and the visiting of the training sponsor (7 hours average). Conducting follow-up of former students consumed the least amount of a teacher-coordinator's time in any given week.

In a comparision by states, Virginia teacher-coordinators spend over twice as much time (13 hours average per week) in teaching the cooperative related class than do coordinators in the states of Arizona and Minnesota. (6 hours average per week)

Teacher-coordinators in Minnesota spend an average of 18.5 hours per week in non-related cooperative functions, including teaching non-cooperative related classes. Teacher-coordinators in the other four states participating in the study spend an average of 6 hours per week in non-cooperative related activities.

When asked if they receive reimbursement for mileage relating to duties of coordination for the program, 86 percent of the teacher-coordinators indicated that they were receiving reimbursement. Eleven percent indicated they received no reimbursement.

Percentage of time allotted to coordination - Table 9 depicts the percent of contract time allocated to the role of teacher-coordinator for Cooperative Vocational Education during the school year. Forty-seven percent of the coordinators allocate 100 percent of their time to Cooperative Vocational Education programs. Thirty-seven percent of the coordinators spent between 40 and 60 percent of their time in coordination activities. Only 7 percent of the coordinators spent 30 percent or less on coordinating activities as a whole.

A state-by-state breakdown of this time allocation to coordinating activities indicates that 12 out of 15 teacher-coordinators in the state of Ohio coordinate 100 percent of their time while 2 out of 15 coordinators spend 50 percent of their time coordinating. The majority of teacher-coordinators in Arizona spend between 40-60 percent of their time coordinating. Sixty percent of the coordinators in Oklahoma spend 100 percent of their time coordinating. The majority of Minnesota's teacher-coordinators (55 percent) spend between 40 and 60 percent of their time coordinating. Forty-three percent of Virginia's teacher-coordinators spend 100 percent of their time coordinating.

TABLE 9.--Percentage of contract time allocated to role of teacher-coordinator during school year
(Question 11)

N = 75

	Teacher Responses											
	AZ		MN		OH		OK		VA		Total	
Percent of time	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
100 percent. . .	2	13	4	36	12	80	12	60	6	43	36	47
90 percent. . .					1	7	1	5	3	22	5	7
80 percent. . .	1	7									1	1
70 percent. . .												
60 percent. . .	6	40	3	28			1	5	2	14	12	17
50 percent. . .	2	13	2	18	2	13	1	5			7	9
40 percent. . .	3	20	1	9			3	15	2	14	9	12
30 percent. . .			1	9					1	7	2	3
20 percent. . .	1	7					1	5			2	3
10 percent. . .							1	5			1	1
Total	15	100	11	100	15	100	20	100	14	100	75	100

Students taught and coordinated by teacher-coordinators - Table 10 indicates the percentage of students that are coordinated by the teacher and also receive instruction in a related class from the coordinator. Ninety-six percent of the teacher-coordinators responded that 76 percent or more of the students that they coordinate in the cooperative program, they also teach in a formal class setting.

TABLE 10.--Percentage of students who are taught in the formal class setting and coordinated on-the-job by the same teacher-coordinator. (Question 13)

N = 75	Teacher Responses*	
Percentage	No.	Adjusted %
100-76.	71	96
75-51	1	1
50-26	2	3
Total	74	100

Length of employment as teacher-coordinator - Table 11 depicts the number of months that a teacher-coordinator is employed with the school district. Fifty-one teacher-coordinators (68 percent) are employed under a ten month contract. Twenty-two teachers (29 percent) are employed eleven or more months as coordinators with 2 teachers being employed as coordinators for 9 months.

TABLE 11.--Length of time that teachers are employed as coordinators by the district (Question 14)

Months Employed	Teacher Responses by Program Area: Agriculture Education	Business Education	Distributive Education	Health Education	Home Economics Education	Trade & Industrial Education	Diversified Cooperative	Totals
Twelve			4			3		7
Eleven	3	6	2			4		15
Ten		19	16	3	1	8	4	51
Nine			1		1			2
Totals	3	25	23	3	2	15	4	75

In analyzing the hiring of teacher-coordinators by states, it was found that all of Oklahoma's coordinators were on 10-month contracts, and all but one of the coordinators in Ohio was on a 10-month contract. Arizona hires the large majority of their teacher-coordinators on a 10-month contract with the exception of coordinators in agriculture who are hired for 11 months according to the completed questionnaires. Minnesota was split equally between 10- and 11-month contracts for their teacher-coordinators while Virginia hired an equal number of teacher-coordinators on 11- and 12-month contracts according to the survey.

Hours of release time for coordination - Table 12 combines questions 15 and 16 to determine the number of hours that coordinators have for release time to coordinate the cooperative program.. The table also lists the number of students that each teacher coordinates.

Eighty-five percent of the teachers are released between 2 and 3 hours each day to coordinate the Cooperative Vocational Education Program.

Sixty-five percent of the teachers coordinate between 10 and 29 students.

The average number of students being coordinated by the teacher-coordinator for each hour of release time is 11 students.

TABLE 12.--Number of students coordinated and number of hours released for coordination
(Questions 15, 16)

Number of Students Coordinated	Hours of Release Time for Coordination						Teacher Response	
	1	2	3	4	5	8	No.	%
50-40.		2	6	3			11	14.7
39-30.		5	5	1	1	1	13	17.3
29-20.	3	17	3				23	30.7
19-10.	4	10	12				26	34.7
9-1.	1		1				2	2.6
Total Teachers Responding	8	34	27	4	1	1	75	100

Use of training agreements - The data derived from Table 13 indicates that a high percentage of teacher-coordinators use training agreements and training plans. Ninety-six percent of the teacher-coordinators use training agreements while 82 percent of them use training plans.

TABLE 13.--Use of training agreements and training plans by teacher-coordinators
(Questions 19, 20)

N = 75	Training Agreements		Training Plans	
Frequency	No.	Adjusted %	No.	Adjusted %
Always	71	96	61	82.4
Usually	3	4	12	16.2
Sometimes			1	1.4
Totals*	74	100	74	100

*One teacher-coordinator failed to respond to this question.

Assignments performed by coordinators - In Table 14, teacher-coordinators were asked to indicate if they performed all of the assignments as listed. As can be derived from the table, the large majority of teacher-coordinators perform all of the tasks as listed.

TABLE 14.--Kinds of assignments performed by teacher-coordinators (Question 21)

Assignments	Teacher-coordinator responses	
	No.	%
Establish guidelines for CVE program.	72	96
Enroll students in CVE.	72	96
Teach related class	73	97
Assist student to locate training station	74	98
Work with student in completing training agreement	74	98
Work with student in completing training plan.	74	98
Place students on job	74	98
Manage the attendance, transfers, and terminations of coop students	69	92
Call on employer periodically for student evaluation	74	98
Evaluate students who are in program.	74	98
Supervise employer-employee appreciation event. .	73	97
Advise student vocational organization.	70	93

Selection of training stations - The data derived from Table 15 indicate that the most frequent means of establishing training stations in the Cooperative Vocational Education Training program is from a visit to the place of business. One hundred percent of the teacher-coordinators indicated that they locate training stations using this method. The second most frequently used method to establish training stations is through the use of the telephone to a potential training sponsor. Only 7 teacher-coordinators indicated that they located training sponsors through contact with the school or District Coop Director.

TABLE 15.--Procedures used to select training stations (Question 22)

Procedures	Teacher Responses*	
	No.	%
Visit place of business and select training station.	75	100
Phone contact.	72	96
Requests by letter	34	45
Contact Employment Security or Job Service	29	39
Receive list of training stations from school coop director.	14	19
Receive list of training stations from district coop director.	7	9
Receive list of training stations from other teacher-coordinators	7	9
Receive list of training stations from other training sponsors	7	9

*Coordinators could respond more than once.

Selection of students by training sponsor - When teacher-coordinators were asked to identify the procedures used by training sponsors to select students for participation in the cooperative program, the majority indicated that they select the students from two or more students supplied by the teacher-coordinator.

Counseling procedures used by coordinators - Teacher-coordinators were asked to identify the methods used in career counseling students who were part of the Cooperative Education program. Seventy-three teachers indicated that they had career counseled the majority of their students on an individual basis. Sixty-two coordinators indicated that they had also career counseled students using the

group counseling method. Eleven coordinators indicated that they used additional methods to career counsel students but there was no pattern established here. See Table 16.

When asked to indicate on the average, how many students received career counseling during the current year, teachers identified the method and number of students counseled as indicated in Table 16.

TABLE 16.--Methods used for career counseling cooperative vocational education students within the department (check all that apply) (Question 24)

	Teacher Responses	
Method	No.	%
Individual counseling	73	97
Group counseling	62	83
Other (no pattern was established)	11	15

Student breakout by sex and ethnic origin - From the teacher-coordinator population surveyed in this study, Table 17 shows that over the past three years the teacher-student ratio is decreasing. This table does not take into consideration the hours of release time given to the coordinator to coordinate these students, however.

During the past three years, an increasing number of males and conversely a decreasing number of females are entering the cooperative programs.

Concerning the ethnic breakout, 91 percent of the total Coop population are white in 1980-81 compared to 86 percent two years ago.

TABLE 17.--Breakout of Cooperative Vocational Education students enrolled in high school Vocational Education departments during school years 1977-80 (Question 26)

	Total Students		Ethnic Breakout															
			Male		Female		White		Black		Oriental		Hispanic		A. Indian		Other		Total
Year	No.	Mean	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	Teachers Responding
1977-78	1735	27	711	41	1024	59	1511	87	159	9	8	.8	37	3	17	.7	3	.2	59 of 75
1978-79	1998	29	813	41	1185	59	1726	86	198	10	10	.6	40	2	18	1	6	.2	65 of 75
1979-80	2077	28	838	40	1239	60	1780	85	232	11	6	.8	40	2	18	1	1	.1	69 of 75
1980-81	1918	26	840	44	1078	56	1741	91	84	4	11	.6	47	2	29	1.4	6	.3	70 of 75

There were more teachers responding to this question for the year 1980-81 than for previous years for two reasons: First, access to enrollment information was limited in previous years; and second, some teachers had not been employed during the time when enrollment information was requested.

Admittance procedures for students entering Cooperative Program - Fifty-six percent of the teacher-coordinators indicated that the students must be in at least the twelfth grade before they can be admitted to the cooperative program.

Eighty-two percent of the teachers of the population require the student to be at least 16 years of age before being admitted to the cooperative program. Forty-nine percent of the teachers indicated that students in their cooperative programs have developed an occupation

TABLE 18.--Teacher-coordinator response to admittance procedures for students entering Cooperative Vocational Education (Question 27)

Procedures	Grade 11	Grade 12	Age 15	Age 16	Age 17	Always	Most Often	Some-times	Seldom	Teacher Responses* No.	Teacher Responses* %
Students must be at least grade	32	41								73	97
Age of student must be at least			10	60	3					73	97
Student has an occupational or vocation-al interest						27	36	9	1	73	97

*Three teachers failed to respond to this question.

intent before beginning the cooperative program. Only 10 teachers indicated that their students sometimes or seldom have declared a vocational or career intent.

Instruction methods in related class - Table 19 depicts the methods of instruction used in the related class. All 73 teacher-coordinators responding to question 30 use the lecture method as the most prevalent form of instruction. Ninety-two percent reported using the individual or small group method as the second most popular form of instruction. The least popular form of instruction used by teacher-coordinators was programmed instruction with 75 percent using this kind of instruction.

TABLE 19.--Analysis of whether the students receive training in a related class by specific methods of instruction (Question 30)

N = 75	Teacher Response		
Method	Yes	No	Total
Lectures	73		73
Individual or small group.	69	6	75
Large group instruction.	66	9	75
Informal non-teacher centered instruction.	64	11	75
Role playing	59	16	75
Programmed instruction	56	19	75

Cooperative program requirements - According to data in Table 20 teacher-coordinators feel that they are given sufficient release time to coordinate their cooperative programs. Ninety-six percent (or 71 coordinators) indicated that their students all receive the minimum wage or student learner wage as a student participant of the cooperative program.

Over 91 percent of the coordinators require training plans, training agreements, and that the student and/or training sponsor is visited for purposes of coordination at least every six weeks. Ninety-one percent of the coordinators also indicated that their

TABLE 20.--Indicate whether or not the following are required as part of the Cooperative program (Question 29)

N = 75	Teacher Responses		
Program Requirements	Yes	No	Total
The teacher-coordinator is given sufficient release time from teaching responsibilities to coordinate the cooperative program. .	74	1	75
Cooperative students receive at least the minimum wage or student learner wage.	71	4	75
A training plan is completed and signed by the employer, student and school	70	4	74
The student and/or supervisor are visited on site by a teacher-coordinator at least every six weeks	68	7	75
The teacher-student ratio is not greater than 25-1 per hour of release time.	68	7	75
A training agreement is signed by the employer, student, and school	66	8	75
The student receives one or more years of inschool vocational training . . . . . before being admitted to cooperative training.	23	50	73

student-teacher ratio per one hour of release time was not greater than 25 to 1.

One note of interest was that only 32 percent of the coordinators require one or more years of in-service vocational training before the student can be admitted to cooperative training.

Student entrance into Cooperative Vocational Education - the data from Table 21 indicate that the large majority of students entering cooperative programs are placed by the school counselor with the approval of the teacher-coordinator. Of 67 teachers responding to question 28 in Table 21, 60 of them (or 90 percent) approve counselor recommendation for students to enter cooperative programs.

TABLE 21.--Indication of how students are received into Cooperative Education program (Question 28)

N = 75	Teacher Response	
Method	No.	Adjusted %*
School counselor places students into program with teacher approval	60	90
School counselor places students into program without teacher approval	7	10
Total	67*	100

*67 out of 75 teacher-coordinators responded to this question.

Instruction content, related class - Table 22 indicates the content of the instruction received by students enrolled in the cooperative related class (Question 31 - check all that apply). All coordinators indicated that the teaching of attitudes and employer-employee relationships were high priority for content in the related class.

Ninety-nine percent of the teacher coordinators indicated they teach communication skills and payroll procedures to the students as part of the related class. The least number of coordinators, although still high (92 percent) indicated they taught vocational skills as part of the content of the related class.

TABLE 22.--Analysis of content of instruction cooperative students receive in the related class (check all that apply) (Question 31)

N = 75	Teacher Response	
Class content	No.	%
Attitudes	75	100
Employer-employee relationships	75	100
Communication skills	74	99
Payroll procedures	74	99
Employee-customer relations	72	97
Methods of dress	72	97
Information on current technology	71	95
Economic information	71	95
Academically related instruction	70	93
Vocational skill training	69	92

Percent of student time spent in school and on the job - Fifty-one percent of the teachers in Table 23 indicated that students spend equally as much time at their training station as they do at school. An additional 15 percent of the coordinators indicated that the students spent more time (ranging from 60 to 80 percent of their time) in school. Twenty percent of the coordinators indicated that students spent more time at the training station (ranging from 60 to 80 percent) than at school.

TABLE 23.--Percent of time that students enrolled in Cooperative program spend in school and at training station (Question 32)

Percent of time spent in school (vs percent of time at training station)	Teacher response Concerning students	
	No.	Adjusted %
80.	2	3
70.	9	12
60.	10	14
50.	37	51
40.	6	9
30.	7	10
20.	1	1
Total *	72	100

*Three teachers did not respond to this question.

Remuneration given to cooperative students - Table 24 depicts the total number of students coordinated by teacher-coordinators of the population and the type of wages they receive under the Cooperative

Vocational Education program. Ninety-seven percent (or 1870 students) receive the minimum wage while only two students receive no wage.

TABLE 24.--Analysis of the number of students participating in Cooperative programs who receive the minimum wage, student learner wage, or no wage (Question 33)

Type of wage	Teacher response	
	Student No.	%
Minimum wage.	1870	97.5
Student learner wage.		
No wage		
Total number of students	1918	100.0

Cooperative influences on students - The data derived from Table 25 indicate that, from the perception of the teacher, students are motivated, absent less often, and tend to remain in school longer as a result of Cooperative Education. Seventy-two percent of the coordinators indicated that students are motivated a great deal by Cooperative Education programs while only one teacher indicated students received little motivation from Coop.

Sixty-four percent of the teachers responding indicated that students were absent less often as a direct result of Cooperative Education programs.

Forty-five percent of the coordinators expressed that the cooperative programs had a great deal to do with influencing students remaining in school.

TABLE 25.--Influences Cooperative Vocational Education has had on students (Questions 34-35)

N = 75	Great deal Influence		Some Influence		Little Influence		Undetermined Influence		No Influence		Total Responding
Influences	No.	%	No.	%	No.	%	No.	%	No.	%	
Motivation	54	72	19	25	1	1	1	1			75
Absenteeism	48	64	25	33	2	3					75
Grades	25	33	47	63	1	1	1	1	1	1	75
Influence student to remain in school	34	45	34	45	1	1			6	8	75

Forty-seven percent of the teachers indicated that student grades were influenced somewhat by the cooperative programs.

Placement services provided by high school - Table 26 indicates that 43 percent of the coordinators responding to question 36 had no placement service provided by the high school for students seeking employment. Twenty-one percent of the coordinators responding to the question indicated a placement service was provided by the high school. There was no clear-cut finding from this question.

TABLE 26.--Analysis of the availability of placement services provided within the high school for students who wish to seek full time employment upon completion of their high school training (Question 36)

N = 75	Teacher Responses	
Services Provided	No.	Adjusted %
No placement service is provided	29	43
A placement service is provided for students seeking full time employment.	14	21
A limited placement service is available for those students who have received vocational or career training	10	15
Other.	14	21
Total	67*	100

*Eight coordinators did not respond to question.

Students reasons for leaving Cooperative programs - When asked if some students had been dropped from the Cooperative program this year, 85 percent (or 64 coordinators) indicated that 203 students had dropped

from their programs. A total of 1918 students were enrolled by all coordinators participating in this study, thereby establishing 11 percent of the total students enrolled left Cooperative programs of the participating coordinators.

Reasons why students left Cooperative programs - Table 27 depicts the largest single reason why students terminated the cooperative program was for personal reasons. The second most common reason for program termination was that the students would not follow program requirements according to 34 teacher-coordinators who responded to this question.

TABLE 27.--Reasons why students left Cooperative Vocational Education program (Question 38)

Reasons for leaving	Teacher Responses			
	Yes	No	No Response	Total
Student terminated program for personal reasons.	38	14	23	75
Would not follow program requirements.	34	17	24	75
Teacher-coordinator terminated student from program.	31	16	28	75
Employer terminated employment of student	15	29	31	75
Student lost interest in program . . .	13	26	36	75
Student had to change because of schedule conflict	12	32	31	75
Other (no pattern established)	26	5	44	75

Follow-up program for former students - The data extracted from Table 28 indicates follow-up of formerly enrolled students of Cooperative Education programs is most often done by the teacher-coordinator. Fifty-nine percent of the coordinators indicated that the teacher-coordinator was the person most directly involved in making the contact with the former student. Twelve percent of the coordinators indicated that there was no follow-up program in existence at the time they completed the questionnaire.

TABLE 28.--Analysis of the follow-up ptrogram for students formerly enrolled in Cooperative Education Program (Question 39)

N = 75	Teacher Responses*	
Contact of student is made by	No.	Adjusted %
Teacher coordinator.	40	59
No present follow-up program	8	12
Administration (school cooperative coordinator, etc.)	8	12
District	5	7
School counselor	5	7
Department	1	1.5
Not acquainted with process used	1	1.5
Total	68*	100

*Seven coordinators did not respond to question.

Frequency of follow-up program - The data derived from Table 29 indicates that follow-up on graduating students of Cooperative Education is conducted by the majority (80 percent) of high school programs

each year. Only 10 percent of the schools are conducting follow-up on graduating students of Cooperative Education each five years and no follow-up programs are conducted two years after students have graduated from cooperative programs.

TABLE 29.--Frequency of the follow-up program conducted in the high school programs for graduating students of Cooperative Vocational Education (Question 40)

N = 75	Teacher Responses*	
Frequency	No.	Adjusted %
Every year	53	80.3
Every two years	0	0
Every five years	7	10.6
Do not know	6	9.1
Total	66*	100.0

*Nine coordinators did not respond to this question.

Provisions in Cooperative Program for special populations - Table 30 indicates that 73 percent of the teachers have special programs in Cooperative Vocational Education for special populations such as handicapped, disadvantaged, etc. Only 27 percent of the coordinators indicated they have no program at present for special populations.

Of the 55 teachers who indicated they had programs for special populations 12 said they ran individual instruction programs for these students. Ten of the 55 teachers indicated they ran special programs directed to students involved in Cooperative Vocational Education. No further detail was given.

TABLE 30.--Analysis of special provisions at high school level in Cooperative Vocational Education for special populations (disadvantaged, handicapped, etc.) (Question 41)

N = 75	Teacher Responses	
Response	No.	%
Yes	55	73
No	20	27
Total	75	100

Number of disadvantaged and handicapped students enrolled in Cooperative Programs - The number of disadvantaged students enrolled in the total student population (1918) is 149. This represents 8 percent of the population.

The number of handicapped students enrolled in Cooperative Education programs is 24. This amounts to 1 percent of the population. Ohio with 50 students has the greatest number of disadvantaged and handicapped students enrolled in cooperative programs. Ohio has 19 percent of their total population of 255 students who are in the category of special populations enrolled in cooperative programs. Minnesota with a total of 257 students in their population has 14 students (5 percent) who are in cooperative programs.

One additional finding considered to be important is that only 14 out of 75 teacher-coordinators in this study are dealing with the 24 handicapped students enrolled in Cooperative Education.

Sixty of the 75 teacher-coordinators involved in this study work with the 149 disadvantaged students who are enrolled in Cooperative Education.

High school dropouts and youth unemployment - When teacher-coordinators were asked to identify what their school had done to meet requirements of the federal law with reference to high school dropouts and areas with high youth employment almost all responded. Fifty percent of the teachers indicated they had no plan at this time to serve these students. Forty-nine percent of the teachers indicated they had a plan and were concentrating on both the concern for high school dropouts and areas with high youth unemployment.

Forty-three percent of the teacher-coordinators indicated that they worked with students who were potential dropouts. The range of handicapped students involved in cooperative programs under teacher-coordinator direction was 10 with the mean being 3.5. Total number of students fitting the definition for a dropout in the 32 programs was 208. This amounts to 11 percent of the total number of students involved in Cooperative programs within the population.

School training facilities - In Table 32 the data indicate that teacher-coordinators were most pleased with modern equipment found in laboratories, kitchens, shops, etc. Responses from 41 teachers indicated that they were most concerned about equipment. Twenty-nine of the coordinators felt that good classroom facilities helped strengthen their programs while 24 of the coordinators expressed special concern

TABLE 31.--Number of disadvantaged and handicapped students enrolled compared to total cooperative enrollment in all programs of the population (Question 42)

	Arizona		Minnesota		Ohio		Oklahoma		Virginia		Total	
Total No. Coop Students	365		257		255		587		463		1918	
Special populations	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Disadvantaged	31	9	10	4	43	16	26	4	39	8	149	8
Handicapped	6	1	4	1	7	3	4	.6	3	.6	24	1
Totals	37	10	14	5	50	19	30	4.6	42	8.6	173	9

with having a coordinator's office with a phone for contacting training sponsors.

Similar concerns were indicated by the teachers as they listed the poor features of their school training facilities.

TABLE 32.--Description of facilities used in the department program for Cooperative Education as they relate to current needs of business and industry (Question 44)

School Training Facilities			
Good features	No. of responses*	Bad features	No. of responses*
Modern equipment. .	41	Poor facilities.	19
Classroom	29	Bad equipment. .	16
Teacher-coordinator office.	24	Lack of work place.	13
Others (no pattern)	15	No office. . . .	12
		Other (no pattern)	12

*Teacher-coordinators could respond more than once.

Advisory committee contributions - Table 33 depicts the extent of the advisory committee contribution to the Departmental Cooperative Vocational Education Program.

Thirty-nine percent of the teacher-coordinators indicated that the advisory committee had frequently contributed to the success of the cooperative program. Twenty percent of the teachers said the advisory committee had rarely or never contributed to program improvement in the cooperative program.

TABLE 33.--The extent the vocational advisory committee contributed to program improvement (Question 45)

N = 75	Teacher Response	
Extent	No.	%
Frequently	29	39
Sometimes	19	25
Very frequently	11	16
Rarely	8	10
Never	8	10
Total	75	100

Vocational advisory committee meetings - In Table 34, thirty percent of the teacher-coordinators indicated that their advisory committees had met three or more times during the year. Twenty-eight percent of the coordinators said their advisory members met once during the year and 14 percent of the coordinators commented that their school had no advisory committee.

TABLE 34.--Frequency of vocational advisory committee meetings this school year (Question 46)

N = 75	Teacher Responses*	
Frequency	No.	Adjusted %
Three or more times	22	30
Once	21	28
Twice	18	24
None	3	4
Do not have one	10	14
Total	74	100

The extent of union assistance on Cooperative Programs - Table 35 depicts teacher impressions of union assistance to cooperative programs. Ninety percent of the teachers responding indicated that the unions gave no "visible assistance" that could be determined to their cooperative program. Only one teacher indicated that the unions had helped their programs. Six teachers (8 percent) said the unions had hindered program improvement.

TABLE 35.--The extent that unions have assisted the school Cooperative Vocational Education Program (Question 47)

N = 75	Teacher Response	
Extent	No.	Adjusted %
No visible assistance from union that can be determined.	66	90
Unions have hindered program	6	8
Most helpful in helping program improve.	1	2
Total	73	100

Listing of most important features of program and reasons for success - Table 36 depicts the responses of teacher-coordinators in rank order concerning special features of their Cooperative programs and reasons for success.

Forty-eight teachers indicated that the most important reason for program success was because they received administration support for program operation. Also listed as high on priority list for program success was the rapport that had developed between teacher-

coordinators and training sponsors. Less than a third of the teachers (lowest ranking) listed advisory committee support as a reason for their program success.

TABLE 36.--School has been identified as having a model Cooperative Vocational Education program. Name some of most interesting features of program and main reasons for program success (Questions 48,49)

Reasons for program success as ranked by teacher-coordinators	Teacher Responses No.*
Administrative support	48
Teacher-coordinator/training sponsor rapport	40
Student interest	40
Teacher-coordinator interest	38
Sufficient time for coordination	37
Vocational student organization	35
Teacher/student ratio within 25-1 ratio	34
Very good training stations	31
State department support	29
Advisory committee support	29
Other (no special pattern)	55

*More than one response was possible on this question.

Problems needing attention for program improvement in Cooperative Vocational Education - The data derived from Table 37 indicates that the largest number of teacher-coordinators (43) felt that they needed more support from school counselors to improve their programs. More teacher-coordinator time and more training stations were the next greatest concerns of the coordinators. One-third (25) of the teachers expressed concern that training sponsors need to know more about and become involved in the Targeted Jobs Tax Credit Program.

TABLE 37.--Problems needing attention to improve Cooperative Vocational Education program (Question 50)

Needed improvements	Teacher Responses No.*
More counselor support.	43
More teacher-coordinator time	38
More training stations.	35
Equipment needs improvement	31
Need student vocational organization.	30
More Targeted Jobs Tax Credit Program for employers	25
Need advisory committees.	20
Increase enrollment	11
Other (no special pattern).	41

*More than one response was possible on this question.

Components of program quality - Teacher-coordinators were asked to rate their program's success in terms of a number of specific program components (See Table 38).

Teacher-coordinators compared their program most often with the following:

1. Teacher enthusiasm toward Cooperative Education
2. Cooperation with training sponsor
3. Administrative support
4. Relevance of training received to real world working conditions.

Teacher-coordinators compared their program least often to the list of components with the following:

1. Active use of advisory committees
2. Intellectual ability of students in their field
3. Cooperation of unions.

TABLE 38.--Rate your Cooperative program to the following list of components of program quality (Question 51)

N = 75

Components	Teacher Rating							
	Excellent	Good	Average	Fair	Poor	Not Applicable	Don't Know	Total
My enthusiasm toward cooperative program.	63	11	1					75
Cooperation of training sponsor. .	47	21	5					73
Administrative support of cooperative program	46	20	7	1	1			75
Administrative commitment to cooperative education.	44	21	5	2	3			75
Relevance of training to real world working conditions	43	30	1					74
Student enthusiasm toward cooperative program.	39	30	6					75
Quality of training sponsor supervision.	33	33	8	1				75
Overall quality of cooperative program.	31	42	2					75
Support of other faculty within department	31	21	16	2			5	75
Job success of students completing program.	30	37	5			1	2	75
Follow-up of former cooperative students	25	17	21	3		6	3	75
Job success of students in program	23	47	5					75
Counseling within the department for coop student	20	45	8	1				74
Recruitment of students.	20	33	20	1	1			75
Placement of students in same area of training after program completion	17	30	23			5		75

TABLE 38.--Continued

N = 75

Components	Teacher Rating							
	Excellent	Good	Average	Fair	Poor	Not Applicable	Don't Know	Total
Students continuing post secondary training in same area as received in high school	17	29	23	1	1			71
Active use of advisory committees. .	13	25	22	8	6	1		75
Intellectual ability of students in their field.	5	37	31	1	1			75
Cooperation of unions.		5		1	11	52	5	74

STUDENT INSTRUMENT

Each of the eighty teacher-coordinators participating in this study distributed student questionnaires to two of their students currently involved in cooperative education. One hundred sixty questionnaires were distributed with 134 (or 84 percent) being returned.

Students who completed the questionnaires came from 58 different schools. One hundred twenty-nine students were in twelfth grade while five students were in eleventh grade. All vocational program areas were represented in the completed student questionnaires.

Analysis of student sex, marital status, and ethnic origin - Ninety-three (69 percent) of the students completing the questionnaire were female while 41 males (31 percent) made up the sample balance. One hundred twenty-eight (97 percent) of the participating students were single. Additional information found in Table 1 indicates that 125 (or 93 percent) of the students were white with six (or 5 percent) black students being the second largest group of participants in the study.

TABLE 1.--Analysis of student sex, marital status, and ethnic origin (Question 5)

N = 134	Student Response	
Status	No.	%
Female	93	69
Male	41	31
Single	128	97
Married	4	3
White	125	91
Black	6	5
Oriental	1	1
Hispanic	1	1

Student by Grade - Table 2 ranks students by grade standing. In overall grade standing, sixty-nine students (53 percent) indicated they were "B" students, 35 (or 27 percent) said they were "A" students, while 27 students indicated they were "C" or below.

TABLE 2.--Analysis of overall grade standing (Question 7)

N = 134	Student Response	
Grade	No.	Adjusted %*
A	35	27
B	69	53
C	25	19
D	2	1
Total	131	100

*Three students did not respond to this question.

Reason for becoming a part of Cooperative Vocational Education - Table 3 indicates that 86 students (66 percent) said they became a part of Cooperative Vocational Education because they wanted training for a job. Twelve students (9 percent) stated they wanted to sample various occupations while 11 students (8 percent) completing the questionnaire indicated they became part of the program because they needed to work to get money.

TABLE 3.--Reasons that students became involved in Cooperative Vocational Education (Question 8)

N = 134	Student Response	
Reason	No.	Adjusted %
Wanted training for job	86	66.2
Wanted to sample occupations.	12	9.2
Needed work for pay	11	8.4
Bored with school	1	1.
Other (no pattern established).	20	15.4
Totals	130*	100

*Four students did not respond to this question.

How student first learned about cooperative program - Table 4 indicates that 45 students (37 percent of the total) learned about the cooperative program from a friend. The second most mentioned source for learning about cooperative education was from a teacher, with 40 students (33 percent) indicating this source. The least frequent source mentioned was from a school poster where two

students listed this source as their first contact with cooperative education.

TABLE 4.--How student first learned about Cooperative Vocational Education program (Question 9)

N = 134	Student Response	
Source	No.	Adjusted %
Friend.	45	37
Teacher	40	33
Counselor	18	15
Parent or relative.	17	14
School poster	2	1
Total	122	100

Students were asked to indicate how long they had been working in the program. Their responses gave the mean as 10.6 months with the mode being 8 months.

How often do students go to work - Table 5 indicates how often students enrolled in cooperative programs work at their training stations.

The large majority, 96 (or 72 percent) of the students indicated they go to work each school day. Twelve students (or 9 percent) said that they work every other day while 18 percent of the students responded that they worked various other schedules with no particular pattern being established.

TABLE 5.--How often are students supposed to work at training station (Question 11)

N = 134	Student Response	
Frequency	No.	Adjusted %
Every day	96	72
Every other day	12	9
Every day - every other week	1	1
Other (no pattern established)	24	18
Total	133*	100

*One student did not respond to this question.

The mean number of hours worked by students each week was 21 with a minimum number of hours that a student worked being 10 with a maximum of 49.

The mean for number of hours that students were in regular classes each week was 14.8, the minimum hours being one with the maximum being 30.

Pay for work at training stations - Table 6 depicts beginning and current hourly pay that students receive at their training stations. With 133 of a possible 134 responding to this question from all program areas the mean wage was $3.53 per hour. The students' average starting wage per hour was $3.18 with students in the trades and industrial education drawing the larger starting and current average hourly pay.

TABLE 6.--Amount of pay received by student for work at training station (Question 14)

N = 134	Student Response	
Analysis	Current Hourly pay	Starting Hourly pay
Mean	3.53	3.18
Mode	3.25	3.10
Minimum	2.24	2.00
Maximum	6.00	5.00

Did coop assist student with career decision - Table 7 indicates students' judgement in determining if the cooperative education experience was a factor in his or her career choice. Sixty-eight students (51 percent) indicated that they were much better prepared to make a career decision as a result of cooperative education. Forty-five students (34 percent) felt they were definitely better prepared to make a career choice while only 4 students felt that there was no change in their thinking about a career choice as a result of their experiences in cooperative education.

TABLE 7.--Has the Cooperative Vocational Education program helped the student to decide on an occupation (Question 15)

N = 134	Student Response	
Decision	No.	%
Much better prepared to make career decision because of cooperative experience	68	51
Definitely.	45	34
Somewhat better prepared to make career choice. .	16	11
No change in thinking about career choice because of cooperative experience	4	3
More confused about career choice since enrolling in cooperative education.	1	1
Total	134	100

Relationship of classroom instruction to work experience - sixty-one students (46 percent) indicated that classroom instruction was closely related to work experience. Table 8 also shows that 30 students (22 percent) thought their classroom instruction related "somewhat" to their work experiences while 13 (10 percent) of the students said that they found "little" relationship with classroom experiences to their experiences at the training station.

TABLE 8.--Relationship of classroom instruction to training station experiences (Question 16)

N = 134	Student Response	
Relationship	No.	%
Closely	61	46
Somewhat	30	22
Very closely	26	19
Little	13	10
Not at all	4	3
Total	134	100

Relationship of job fit to overall career interests - Fifty-three students (40 percent), as depicted in Table 9, said that the work that they were performing at their training station fit "very well" with their overall career interests. Thirty-seven (or 28 percent) of the students expressed that they felt that the job fit "well" with their career interests while 10 students (7 percent) felt that their job fit "only a little" with overall career interests.

TABLE 9.--How well does job fit with overall career interests (Question 17)

N = 134	Student Responses	
Job to career interests	No.	%
Fits very well.	53	40
Fits well	37	28
Fits moderately well.	30	22
Fits only a little.	10	7
Doesn't fit at all.	4	3
Total	134	100

Interest in school before and after cooperative program - Fifty-four percent of the students in Table 10 expressed that they liked school better after entering the cooperative program. Forty-three percent of the students indicated they felt about the same concerning school now as they did before entering the cooperative program.

TABLE 10.--School was more interesting before or after entering cooperative program (Question 18)

N = 134	Student Response	
Liked school	No.	%
Better after entering cooperative program. . . .	72	54
About the same as before you entered cooperative program.	58	43
Better before you got into program	4	3
Totals	134	100

Where students have learned the most about skills needed for their job - In Table 11 sixty-five percent of the students expressed that they had learned the most about skills needed for their job at their training station. The second most frequent place for learning skills needed for employment was at school. Twenty-seven percent of the students responded that school gave them the greatest knowledge about skills for employment.

TABLE 11.--Where students learned the most about skills needed for employment (Question 23)

N = 134	Student Response	
Source	No.	Adjusted %
Training station	82	65
At school.	35	27
On jobs held before entering coop program. . .	5	4
From parents or relatives.	1	1
Elsewhere.	4	3
Total	127*	100

*Seven failed to respond to this question.

Students expectation to find employment in same field where presently being trained - Table 12 indicates that 72 percent of the students expect to be employed in a full-time career in the area where they are presently being trained in cooperative education. Fifty-five percent of the students expressed that they expected to be employed on a full-time basis with the same employer.

TABLE 12.--Anticipation of finding full-time employment in occupation where now employed (Question 24)

N = 134	Student Response					
	Yes		No		Total	
Expectation	No.	%	No.	%	No.	%
Do you expect to find full-time position in occupation where you now work.	97	72	37	28	134	100
Do you expect to be employed with present employer.	72	55	60	45	134	100

Expectations of students one year from now - In Table 13 forty-two percent of the students said that they expected to be working full-time one year from the time they completed the survey instrument. Forty-eight percent felt that they would be either in a four-year or two-year college or trade program.

TABLE 13.--Student expectations one year from now (Question 25A)

N = 134	Student Response	
Expectations	No.	Adjusted %
Working full time.	52	42
In a two-year community college.	29	24
In a four-year college	26	31
In a trade school.	4	3
In Armed Services.	4	3
In high school	3	2
Other	5	4
Don't know	1	1
Total	124*	100

126

*Ten students did not respond to question.

If attending school one year from now will the student work also - Table 14 indicates that 42 percent of the students plan to work part-time while attending school full time. Twenty-seven percent of the students plan to work full-time and attend school part-time.

TABLE 14.--If in school one year from now will student work also (Question 25B)

N = 134	Student Response	
Plans	No.	Adjusted %
Work part-time, school full-time.	43	42
Work full-time, school part-time.	28	27
Work part-time, school part-time.	17	17
Work full-time, school full-time.	5	5
Don't know.	10	9
Total	103*	100

*Only part of the students answered because of the nature of the question.

Working for more than one employer - Question 26 requested students to indicate if they had worked for any other employers in the cooperative program. Seventy-two percent indicated they had not worked for any other employer than the one they were currently trained under. Twenty-eight percent had worked for other employers.

Would students recommend the cooperative program - When asked if they would recommend the Cooperative Vocational Education program to their friends, 99 percent responded that they would.

Questions best describing job - Table 15 lists thirteen questions concerning the student and his or her job. Four questions have noteworthy findings. When students were asked if they had many different assignments on the job, 77 percent responded that they were given a variety of job assignments. The importance of this response is an indicator that the majority of students have many different kinds of training experiences providing additional job enrichment.

Another indicator suggesting students are given good job supervision was on the question, "Do you get clear instructions when you need them." Seventy-three percent of the students responded they did receive clear instructions when needed.

When asked if they could handle a harder job, ninety-one percent of the students indicated that they could "Handle a harder job."

When asked, "Would you like to quit your job," seventy-five percent of the students said "no".

TABLE 15.--Description of training station position (Question 28)

N = 134	Student Responses								Total Responses
Question	Yes	%	No	%	times	%	Don't Know	%	No.
Do you decide how things are done on your job?	18	13	20	15	96	72			134
Are you doing a tougher job now than when you were first hired?	78	58	41	31	15	11			134
Was your job difficult to learn?	24	18	80	60	30	22			134
Can you do your job without thinking?	16	12	94	70	24	18			134
Do you learn something new most days on the job?	67	50	11	9	55	41			133
Does your boss tell you when you do a good job?	72	54	24	18	38	28			134
Do you get clear instructions when you need them?	98	73	7	5	29	22			134
Do you get paid less than adults who do the same job?	65	49	51	38	3	2	15	11	134
Do you have any say in what hours you work?	64	48	23	18	46	34			133
Could you handle a harder job?	122	91	2	2	6	4	4	3	134
Would you like to quit your job?	10	7	100	75	22	16	2	2	134
Do you think your boss would promote you if he could?	79	59	14	10	1	1	40	30	134
Have you had many different assignments on this job?	103	77	12	9	19	14			134

Training Sponsor Instrument

Analysis of Sample

One hundred and sixty instruments were distributed to training sponsors by teacher-coordinators participating in the study. One hundred and twenty-six questionnaires were mailed back for a return of 79 percent. Seventy-eight of the 126 training sponsors operated an independent company while 48 of the training sponsors responding were representing a division of a larger company. The independent companies had as many as 998 employees and as few as one with the median being 132. Where a business was a division of a larger company there were as many as 10,000 employees and as few as five with the median being 1289.

Response per question was somewhat low from training sponsors when compared to responses received from teacher-coordinators and students enrolled in cooperative programs.

Number of years training stations and sponsors have been involved with Cooperative Vocational Education - Table 1 indicates that 74 percent of the companies involved with this study have been involved for 10 years or less. Three percent of the companies have been involved with Cooperative Education more than 20 years. The average company has been involved with Cooperative Education for just under 8 years.

Eighty-seven percent of the training sponsors have been involved in Cooperative Education for up to 10 years, the average being just over 5 years.

TABLE 1.— Length of time training sponsors and company have been involved with Cooperative Vocational Education (Questions 8 and 9)

N = 126	Years						Total		
	No.	%	No.	%	No.	%	No.	%	Mean
Question	1-10		11-20		21-45				
Length of time company has been involved with Cooperative Program	89	74	29	23	4	3	120	100	7.8
Length of time training sponsor has been involved with Cooperative Program	109	87	15	12	1	1	125	100	5.4

Number of students involved in Cooperative Education with your company at present - Responses to question 10 ranged from a low of one student to a high of 60 students hired by a large fast food chain.

When asked to indicate if student placements were increasing, decreasing, or remaining about the same, 74 percent of the employers said placements were remaining about the same. Twenty-two percent of the employers said that placements were increasing while 4 percent indicated a decrease in student placement.

Percentage of cooperative students represented by minority, ethnic or racial groups - Thirty-four percent of the training sponsors responding to this question as shown in Table 2, said that 50 percent of their cooperative students represented minority,

ethnic or racial groups. Fourteen percent of those responding said that 98 percent of their cooperative students represented minority, ethnic or racial groups. Six percent of the training sponsors indicated that they had no students representing minority, ethnic or racial groups. The number of responses from training sponsors to this particular question may discredit the findings.

TABLE 2.—Percentage of cooperative students represented by minority, ethnic or racial groups (Question 12)

Percent of Students	Training Sponsors No.	Adjusted %
98	5	14
60	1	3
50	12	34
34	2	6
33	1	3
30	1	3
25	1	3
20	2	6
11	1	3
10	2	6
5	1	3
2	2	6
1	2	6
0	2	6
Total	35	100

Percent of cooperative students by sex - Thirty seven percent of the training sponsors responding in Table 3 indicated that 98 percent of their students were male. Twenty-one percent of the training sponsors indicated that they had equal numbers of male

and female students employed by them. Seven percent of the training sponsors responded that 100 percent of their students were female. In each case when there was a high percentage of male or female student employees, that particular company traditionally hired only male or female students due to the nature of the work.

TABLE 3.--Percentage of cooperative students by sex (Question 13)

Male %	Female %	Training Sponsors No.	Adjusted %
98	2	21	37
95	5	1	2
90	10	1	2
75	25	3	5
66	34	1	2
54	46	1	2
50	50	12	21
40	60	1	2
34	66	2	4
33	67	1	2
20	80	2	4
10	90	1	2
4	96	1	2
1	99	5	9
0	100	4	7
	Total	57	100

Measurable objectives developed for Cooperative Program - Table 4a provides the training sponsor responses indicating that 48 percent of the training stations have developed specific measurable program objectives for their cooperative program. Table 4b indicates that the two most often mentioned measurable objectives of training sponsors are: 1. Assuring that students develope general skill

training, including the development of proper attitudes and an understanding of the importance of superior job performance.

2. Developing <u>specific</u> skills relating directly to the business in which the student is employed.

TABLE 4a.--Are there measurable program objectives developed for your cooperative program (Question 14-a)

N = 126 - Part A N = 56 - Part B Questions	Training Sponsors Response Yes	No	Total	% Response
Have you developed measurable program objectives for your cooperative program	57	63	120	100
Have you achieved these objectives	46	8	54	95

* Of the 57 who responded they had developed program objectives, 54 responded as to whether they had reached those objectives.

TABLE 4b.--Measurable objectives developed by training sponsors (Question 14b)

N = 56 Measurable objectives	Training Sponsor Response* No.	Adjusted %
General skill training at training station	13	25
Specific skill training at training station	13	25
Full time placement	13	25
Increase training slots	6	12
Create within the student interest for management level positions	3	6
Expose students to careers	2	4
Complete high school	1	2
Total	51	100

* Five training sponsors did not complete question.

Reasons why training sponsors select students for work - Table 5a indicated that the three primary reasons why training sponsors select students to work in training stations is because of coordinators' recommendations (29 percent), sponsors' strong impression about students' non-skill traits (human relations, appearance) (29 percent), and sponsors' strong impression about students' skill traits for that particular business (27 percent).

When asked if the selection process for hiring students (Table 5b), was all right, 77 percent responded that most of the time the process worked well. Thirty-six percent said the process for hiring was satisfactory all of the time.

TABLE 5a.--Reasons why training sponsors selected students to work in training stations (Question 15a)

N = 126	Training Sponsors Response	
Reasons for selection	No.	%
Coordinations' recommendation	35	29
Interview non-skill traits	35	29
Interview skill traits	33	27
Needs	13	11
Other	6	4
Total	122	100

TABLE 5b.—Was the selection process satisfactory from training sponsors point of view (Question 15b)

N = 126 Employer satisfied	Training Sponsor Response* No.	 %
All of the time	44	36
Most of the time	77	63
Part of the time		
Only a small part of the time		
Not at all	1	1
Total	122	100

*Four sponsors did not answer this questions

Evaluation of Cooperative Vocational Education - Table 6 projects the training sponsors evaluation of the Cooperative Program from the experiences they have had with it. One hundred and four training sponsors (83 percent) said they felt the cooperative program was very satisfactory. Twenty-one sponsors (17 percent) felt the program was satisfactory. None of the training sponsors indicated the program was unsatisfactory.

TABLE 6.—Evaluation of Cooperative Vocational Education by training sponsors (Question 16)

N = 126 Evaluation	Training Sponsor Response No.	 %
Very Satisfactory	104	83
Satisfactory	21	17
Unsatisfactory	0	0
Total	125	100

Reactions of training sponsors to possible program improvement - Training sponsors indicated in Table 7 that they thought their own support could improve (63 percent), and 51 percent of those responding indicated they felt that the quality of the student needed to improve.

TABLE 7.--Reactions of training sponsors for possible program improvement (Question 17)

N = 126	Training Sponsor Response							
Question	Excellent		More Support		Adequate		Total	
	No.	%	No.	%	No.	%	No.	Adjusted %
Employer Support	43	35	78	63	2	2	123	98
Quality of Support	56	44	64	51	6	5	126	100
Teaching at high school	73	58	33	26	4	3	110	87
School Administration Support	65	53	17	14	40	33	122	97

*Some did not respond to all parts of the question.

Does the company plan to continue participating with the Cooperative Vocational Education Program - All 126 training sponsors responded to this question with 114 indicating that they planned to continue the program.

Does company plan to continue program?

Response	Number	%
Yes	114	90
No	12	10
	126	100

Twelve training sponsors said they did not plan to continue the program.

When asked if the training sponsors would recommend this program to other employers, 119 indicated they would recommend the program.

Would you recommend this program to others?

Response	Number	%
Yes	119	95
No	6	5
	125	100

Percentage of students employed that have completed the Cooperative Vocational Program - Table 8 provides information relating to the percentage of students completing the cooperative program. Ninety-three out of 116 sponsors responding to the question said that 100 percent of the students they employed completed the program. Nineteen sponsors indicated that 75 percent of their students completed the cooperative experience.

TABLE 8.--Percentage of students employed who complete the Cooperative Program (Question 20)

N = 126 Percentage	Training Sponsors Response No.	Adjusted % Response
100	93	81
75	19	16
50	2	2
25	1	1
Total	116	100

*Ten training sponsors did not answer this question

TABLE 9.--List of various student gains for rating by training sponsor (Question 21)

N = 126

Student Gains	No Improvement No.	%	Little Improvement No.	%	Average Improvement No.	%	Much Improvement No.	%	Very Much Improvement No.	%	Total Response No.	%
Occupational Knowledge			4	3	24	19	72	57	26	21	126	100
Manipulative Skills	2	2	2	2	24	19	63	50	35	28	126	100
Personal and Social qualities	3	2	5	4	30	24	59	47	28	22	125	99
Work qualities and habits	3	2	4	3	38	30	58	46	22	18	125	99

List of student gains as rated by training sponsors - The greatest number of sponsors responded under the heading, "much improvement" to each of the four listed student gains. The sponsors responded in the greatest number (57 percent) to the gain on occupational knowledge of the student. Fewer than four percent of the sponsors indicated that students had made, "little" or "no" improvement in any of the four categories listed.

Training sponsor functions - Sixty-two percent of the sponsors in Table 10 said that they had primary responsibility with reference to the selection of the student.

Clear lines were drawn with reference to job-related curriculum and teaching at the place of business. Ninety-five percent of the sponsors indicated that they saw the teaching of the job-related school curriculum as a function of the school. When asked to indicate who should perform the teaching at the place of business, 91 percent of the sponsors said that should be handled by personnel at the place of business.

TABLE 10.--Does school or employer have training responsibility for listed functions (Question 22)

N = 126 Functions	Primary Responsibility School	Employer	Training Sponsor Total No.	%
Selection of student . .	39	63	102	81
Job related school curriculum	99	5	104	82
Teaching (at place of business)	11	99	110	87

Rating of company's overall relationship with the school - Employers were positive on their relationship with schools. Table 11 shows 72 percent of the sponsors indicating that they have "Excellent" relationships with schools. Seven percent of the sponsors said that they have "Average" relationships with schools.

TABLE 11.--Rating of company's overall relationship with the school (Question 23)

N = 126 Rating	Training Sponsor* No.	%
Excellent	90	72
Above average	26	21
Average	9	7
Total	125	100

*One training sponsor did not respond to this question

Number of times training sponsor or representatives have met with school personnel during current year - Table 12 shows that 75 percent of the training sponsors have met with school personnel four or more times this year. Only 2 percent of the sponsors have not met with school personnel.

Reactions of training sponsors - Table 13 shows the reactions of training sponsors to selected questions relating to Cooperative Vocational Education. Seventy-two percent of the sponsors said they

TABLE 12.--Number of times training sponsor or representative have met with school personnel during current year (Question 24)

N = 126

Frequency	Training Sponsor* No.	Adjusted %
Eight times or more	37	30
Four to seven times	56	45
One to three times	28	23
None	3	2
Total	124	100

*Two sponsors did not respond to question

have hired cooperative graduates on a full time basis. (During the past year, 123 former Cooperative Education students were hired full time by 75 percent of the training sponsors involved in the (study.) Eighty-four percent of the sponsors indicated the cooperative graduates hired were hired in jobs for which they had received training in their cooperative position. Over 85 percent of the training sponsors said that they were not required to adjust any of their hiring standards as a result of hiring graduates from Cooperative Education Programs. One hundred and seven or 88 percent of the sponsors expressed a strong commitment to the Cooperative Vocational Education Program. One hundred twenty-five of the 126 respondents indicated that they paid students who were participating in the cooperative program. Nearly 85 percent of the sponsors indicated they received no reimburse-

TABLE 13.--Reactions of training sponsors to Cooperative Vocational Education Program (Question 25-29)

N = 126	Student Responses						Total Responses*	
	Yes		No		Sometimes			
Question	No.	%	No.	%	No.	%	No.	%
Have you hired any cooperative graduates on a full time basis.....	91	72	35	28			125	99
Were these jobs for which they were trained in the program.....	77	84	7	8	8	9	92	73
Did the hiring of these graduates require any adjustments in your hiring standards.....	13	10	107	86	4	3	124	98
Has your company expressed a strong commitment to Cooperative Vocational Education in general.....	103	88	15	12			122	97
Are the cooperative trainees paid by your company.....	125	99	1	1			126	100
Is your company reimbursed for its participation in the cooperative program.....	14	12	98	12	5	4	117	93

*Because of multiple responses where one response may disqualify the answer of another, all rows do not equal 100%.

ment for participating in the cooperative program. Several who responded "yes" to the question on reimbursement said they were part of the Targeted Jobs Tax Credit Program recently introduced by the Department of Labor.

Training sponsor rating of Cooperative Vocation Education - Table 14 provides an assessment by training sponsor of the Cooperative Program in each of the five states included in the study. Fifty-one percent of the sponsors felt the students enthusiam toward Cooperative Education was excellent. Eighty-four percent of the training sponsors commenting on coordinator enthusiam, said that coordinators enthusiam was excellent.

Fifty-three percent of the sponsors indicated that the quality of on-the-job supervision given by them was excellent. When asked to indicate the relevance of training in school to the real working conditions, 60 percent of the sponsors said they felt the schools were providing this relevance in the cooperative programs.

There was a more even spread of the sponsors under the headings average, good, and excellent when asked to respond to the question about the intellectual ability of students who were participating in Cooperative Education.

TABLE 14.--Training sponsor rating of Cooperative Education Program (Question 30)

N = 126	Training Sponsor													
	Poor		Fair		Average		Good		Excellent		Don't Know		Total Response	
Rating	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Enthusiasm of student toward cooperative program.....					23	18	32	30	64	51			125	99
Enthusiasm of teacher toward cooperative program.....			1	1	3	2	12	10	106	84	3	2	125	99
Quality of on-the-job supervision.....			1	1	12	10	45	36	67	53	1	1	126	100
Adequacy of facilities at school.....			5	4	18	14	35	28	42	33	24	19	123	98
Relevance of training to real world working conditions....			2	2	11	9	33	26	76	60	4	3	126	100
Cooperation of training sponsor.....					5	4	21	17	99	79	1	1	126	100
Cooperation of unions.....	1	1			1	1	2	2	3	2	82	65	125	99
Intellectural ability of students in their field.....					30	24	50	40	40	32	6	5	126	100
Recruitment of students.....	1	1	1	1	16	13	40	32	38	30	27	21	123	98
Job success of students in the program.....					9	7	47	37	51	40	18	14	125	99
Counseling within Department..					11	9	29	23	53	42	31	25	124	98
Placement of students completing program.....					9	7	31	25	39	31	43	34	122	97
Follow-up on former students..	3	2			13	10	14	11	32	25	57	45	119	94
Job success of students completing program.....					5	4	38	30	38	30	42	33	123	98
Overall quality of program....					3	2	31	25	87	69	4	3	125	99

SUMMARY OF CHAPTER

The findings for this study were separated into three main divisions: (1) teacher-coordinator responses, (2) student responses, and (3) training sponsor responses. Each of these instruments, as completed by the respondents, sought to determine the duties, responsibilities, and characteristics of that particular group.

The primary findings with the teacher-coordinator instrument were:

1. Ninety-seven percent of the teacher-coordinators in the study indicated they were under school contract ten or more months during the school year.
2. The majority of coordinators indicated that they perform their coordination duties as part of their contract day rather than as an extended day with or without pay.
3. Almost all (95%) of the coordinators said that the large majority of students that they coordinate were also taught by them in a related class.
4. Seventy-five percent of the teachers' contract time was allocated to the role of teacher-coordinator.
5. The average teacher-student ratio per hour of release time was eleven students.
6. Seventy-two percent of the coordinators indicated that students are motivated a great deal by the cooperative education program while 64 percent of the coordinators were absent less in school as a direct result of Cooperative Vocational Education.

7. The majority of teacher-coordinators require students to be in grade twelve and have an occupational intent before entering the cooperative program.
8. The two activities requiring the greater portion of the teacher-coordinators' week were the teaching of the related class (8 hours) and the visiting of training sponsors (7 hours).
9. Concerning the content of the related class, coordinators indicated that high on the priority for content was the teaching of communications skills, attitudes, and employee-employer relationships.
10. The large majority (73 percent of the coordinators) indicated they have special programs in cooperative education for special populations.
11. The number of disadvantaged students enrolled in the total student population (1918) of this study was 149. This represents 8 percent of the population. The number of handicapped students enrolled in cooperative education programs in this study was 24. This amounted to one percent of the total student population in this study.
12. Forty-nine percent of the teacher-coordinators in the study indicated that there was an active program developed to meet the needs of the high school dropout along with areas where there was substantial youth unemployment.
13. Thirty-nine percent of the coordinators indicated that advisory committees had contributed significantly to the success of the cooperative program.

14. Teacher-coordinators commenting on reasons for program success indicated that administrative support and rapport between coordinators and training sponsors were highest on the list for program success. Sixty percent of the coordinators indicated a need for more school counselor support.
15. The large majority of teacher-coordinators use training plans and training agreements in setting up the student and training sponsor relationship.
16. Ninety-six percent of the teacher-coordinators indicated that all of their students receive the minimum wage or student learner wage as a participant in the cooperative program.
17. Concerning follow-up of former cooperative sutdents, fifty-nine percent of the coordinators indicated that as coordinator they were the person most directly involved with contacting former students.
18. The average number of years of operation for a cooperative program in this study was 13 years.
19. The average length of time that a teacher has served as a teacher-coordinator was 8 years.
20. The large majority of coordinators have attended four or more inservice classes during the last 3 years related directly to Cooperative Vocational Education.
21. The majority of teacher-coordinators report directly to the principal rather than the department chairman when relating matters that have to do with cooperative education.

The primary findings of the student instrument were:

1. Eighty-six of the students participating in the study indicated they became involved in Cooperative Vocational Education because they wanted to receive training for a specific career.
2. Eighty-five percent of the students completing the questionnaire indicated that their experience with Cooperative Vocational Education was a determining factor in his or her career choice.
3. The majority of students indicated that they had greater interest in attending school as a direct result of the cooperative education program.
4. Seventy-two percent of those students responding indicated that they expected to find employment in the area where they were presently being trained.
5. Sixty-five percent of the students in the study indicated that the greatest source for development of skills relating to their job was received from their training station with their school courses having the next greatest impact.
6. The mean number of hours worked by students per week was 21 while the mean number of hours a student was in class each week was 14.8
7. The average wage paid a student participating in cooperative education programs within this study was $3.53 per hour.

8. Ninety-nine percent of the students indicated that they would recommend the cooperative vocational program to a friend if the occasion arose to do so.
9. Students were asked if they had many different assignments on the job; 76 percent responded that they were given a variety of job assignments. The importance of this response is an indicator that the majority of students have many different kinds of experiences providing additional job enrichment.

The primary findings from the training sponsor instrument were:

1. Forty-eight percent of the training sponsors have developed specific measurable program objectives for their cooperative program.
2. The most frequently mentioned measurable objectives developed by training sponsors were:
   - Development of proper attitudes
   - Understanding the importance of superior job performance
   - Development of specific skills relating to the business in which the student is employed.
3. Eighty-three percent of the training sponsors indicated they felt the cooperative program was "very satisfactory," with no cooperative sponsors indicating that the cooperative program was unsatisfactory.
4. When responding to certain questions relating to cooperative education, training sponsors indicated the following:

- One hundred twenty-three former cooperative education students were hired full time by 75 percent of the training sponsors.
- Eighty-one percent of the sponsors said the cooperative graduates hired were hired in jobs for which they had received training in their cooperative position.
- Eighty-five percent of the sponsors indicated they received no reimbursement for participating in the cooperative program. Several who responded "yes" to the question on reimbursement said they participated in the Targeted Jobs Tax Credit program.

5. When training sponsors were asked to identify the reasons why they selected students for the cooperative program, three reasons were repeated most frequently:
   - Coordinator's recommendation.
   - Sponsor's strong impressions about the student's skill in the area of human relations and ability to communicate.
   - Sponsor's strong impressions about student's skill relating directly to the business.
6. Sixty-four percent of the training sponsors felt that the intellectual ability of the students being supplied by the school was in need of improvement.
7. Three-fourths of the training sponsors indicated they met frequently with school personnel relating to matters of the cooperative education program.
8. Ninety percent of the sponsors participating in the study indicated they planned to continue the cooperative program, with 95 percent of the sponsors indicating they would feel most comfortable in recommending the cooperative program to other businessmen.

9. The large majority (75 percent) of the training sponsors indicated they had an "excellent" relationship with the school.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

SUMMARY

Cooperative Vocational Education has as its primary objectives the following:

1. The opportunity for students to learn the vocational skills, duties and practical understanding associated with their career goals
2. The opportunity for students to acquire a set of attitudes and interpersonal skills to use in dealing with employees, supervisors, and customers
3. The opportunity for students to become more aware of the personal values, the strengths and limitations which they possess
4. The opportunity for students to become economically aware of the world in which they are a part

The development, implementation, and retention through proper maintanance of Cooperative Vocational Education programs requires a strong commitment of human and financial resources on the part of federal, state, and local agencies.

Depending on the procedures used to measure Cooperative Vocational Education programs. the outcomes of participation will vary. Federal legislation for the past decade has placed heavy emphasis on vocational training outcomes. Evidence in this study and others in recent years suggest that the cooperative program approach directly responds to the federal request for bonefide training outcomes.

The purpose of this research effort was as follows:

1. To determine the degree to which secondary Cooperative Vocational Education is a viable training method of instruction.
2. To assess the degree of priority given by states to the 1976 Educational Amendments where specific instruction is given...to areas that have high rates of school drop-outs and youth unemployment, as well as high priority to program requirements in the areas of the handicapped and disadvantaged.
3. To evaluate existing programs in all vocational program areas to determine successful components of the Cooperative method of instruction.
4. To locate "models" of CVE across the country at the secondary level to be examined by those wishing to develop strong CVE programs.

There was no attempt to compare Cooperative Vocational Education against other forms of work experience. The study was descriptive in nature.

The methods used in the study included the selection of a jury of experts to assist in the selection of those states that would constitute the model population in the national study.

States selected for the study were Arizona, Minnesota, Ohio, Oklahoma, and Virginia. Contact was made with the directors of Cooperative Vocational Education in each of the five states to verify

their interest in being a participant in the study. All five states indicated their interest in assisting with the study.

The state Cooperative Vocational Education program director was asked to submit a list of schools and teacher-coordinators who could be considered for participation in the study. Specific criteria were given to the directors concerning the process for selection of the schools and teacher-coordinators. One of the criteria to be used by the state CVE director was that the teacher-coordinator have a strong Cooperative Vocational Education program. The teacher-coordinators upon receiving notification that they would be participants in the study, recommended cooperative education students and training sponsors for consideration in the study.

All vocational program areas such as agriculture and business and office, were included in the study with a mixture of participants from small, medium, and large high schools. Care was taken to ensure selection of participants from various appropriate geographical locations for proper representation.

Separate questionnaires were developed, field tested, and personally administered to each individual participating in the study.

The project director went to each of the five states and instructed each of the state staff members concerning procedures to be used as they personally interviewed each teacher-coordinator. A total of twenty members of the five state staffs assisted in personal interviews with teacher-coordinators participating in the study.

Teacher-coordinators in turn, delivered survey instruments to students and training sponsors currently participating in the cooperative program at the local level.

A 94 percent return was received from teacher-coordinators participating in the study. All questionnaires were usable. A return of 84 percent was received from students currently participating in the cooperative program at the local high school. All questionnaires were usable. A 79 percent return was received from training sponsors currently participating in the cooperative program. All questionnaires were usable although a limited number of training sponsors did not complete all questions from the survey instrument.

Percentages, means, modes, standard deviations, and median were computed from the questionnaires return. Data were then analyzed between and among the responses from the three separate groups. Data were then organized for presentation within the study.

CONCLUSIONS

One of the major objectives of this study was to locate ideal high school Cooperative Vocational Education programs throughout the country and to then determine the components which make up the "ideal" Cooperative Program. From the analysis of the survey instruments completed by teacher-coordinators, students and training sponsors, the following conclusions have been drawn concerning the characteristics of quality Cooperative Vocational Education programs at the secondary level.

Components of a quality Cooperative Vocational Education program at the secondary level include the following:

1. A qualified teacher-coordinator is a necessary component of a quality CVE program. The coordinator is certified in at least one of the vocational program areas as defined by the U. S. Department of Education. Recent studies indicate that teacher-coordinators are seldom receiving instruction pertaining to coordination techniques. It was found in this study that the coordinator attends inservice training workshops or classes frequently (at least one per year) to maintain an understanding of the overall professional responsibilities that accompany a quality Cooperative Vocational Education program. It can be concluded that instruction in current techniques of coordination is critical to the success of the teacher-coordinator.
2. Assignments performed most frequently by coordinators include the following (assignments are ranked by the greater amount of time coordinators spend in that particular assignment):
    a. Teach related class
    b. Visit training sponsor (each training sponsor was visited at least every six weeks)
    c. Keep records and report activities

d. Contact employers about job openings for students

e. Advise student vocational organization (DECA, FFA)

f. Talk with students about specific job opportunities

g. Evaluate Cooperative Vocational Education students in class as well as on the job

h. Develop student performance objectives

i. Conduct follow-up of former students (study shows that teacher-coordinators perform this function far more frequently than do other individuals with the school system)

3. In the large majority of cases (above 80 percent) the coordinator teaches in the formal classroom setting (related class) the same students that they coordinate on the job.

4. In terms of content for the cooperative related class, students should receive instruction in at least the following: (Ranked in order of importance)

a. Attitudes

b. Employer-employee relationships

c. Communication skills

d. Payroll procedures

e. Methods of dress

f. Employer-customer relationship

g. Information on current technology

h. Economic information

5. Seventy-five percent or more of the teachers contract time is allocated to the role of teacher-coordinator.
6. All of the coordination time as performed by the teacher is done as part of the regular contract day rather than as an extension of the contract day whether paid or not. (Ninety percent of the coordinators responded that their coordination duties were conducted during the regular school day).
7. The teacher-coordinator is employed ten months or longer to effectively complete the responsibilities that are included in the coordinator position. All but one of the states in the study hired teacher-coordinators on a ten month basis. Virginia hired an equal number of teacher-coordinators on an eleven and twelve month contract, according to the survey.
8. Teacher-student ratio per hour of release time for coordination is eleven students with the average teacher-coordinator having twenty-six students to coordinate over the total release time available for coordination each day.

Participating student

9. The focus of the cooperative program is on the student. In order to be admitted to the Cooperative Vocational Education program, the student--

a. is interviewed by the teacher-coordinator to receive information about the program and to determine if the present vocational preparation is adequate to be admitted to the program;

b. completes and signs a training agreement that spells out the time of day in which the student will be employed, the hourly wage, length of employment, and so forth;

c. completes and signs a training plan that identifies the job-site activities that the student will be involved with;

10. Characteristics of a student entering a cooperative program include the following--

a. The student has an occupational or vocational intent

b. The student is in the twelfth grade

c. The student has received prior vocational program training

d. The student has a scholastic standing of "B" letter grade

e. The student actively seeks training for a job

11. The student, as part of the Cooperative Vocational Education program--

a. is paid the legal minimum wage or student learner rate as established by the U.S. Department of Labor;

b. works each school day;

c. works an average of twenty-one hours per week at the training station;

d. is attending regular classes on the average of fifteen hours per week;

12. Students outcomes as a result of the cooperative vocational experience--

a. are much better prepared to make an occupational decision;

b. appreciate school much more than before becoming a part of the cooperative program;

c. believe that they will find full-time employment in the same area where present training is taking place.

Training sponsor

13. The training sponsor completes the link between the school and the student. In order for employers to be approved as training sponsors they must--

1. provide the student with a quality career training experience;

2. provide feedback periodically to teacher-coordinator concerning students progress on the job;

3. sign the student training agreement and training plan;

4. pay the student at least the minimum wage or student learner wage.

14. Successful characteristics of a training sponsor include the following:

    a. One who understands fully the objectives of the Cooperative Vocational Education training program and is an active partner with the school in assuring that the students are reaching their vocational training objectives.

    b. One who meets frequently (four to seven times per year) with the teacher-coordinator to discuss the cooperative program and to evaluate those students who are participants of the cooperative program.

    c. One who will commit to the hiring of students on a full time basis after students conclude their cooperative training experiences. The study indicated that 72 percent of the training sponsors had hired former cooperative education students on a full-time basis. Students were hired for jobs for which they were trained in the program.

    d. One who can provide a setting where the student can show marked improvement in occupational knowledge, manipulative skills, personal and social skills, and work qualities and habits as a result of their experiences as a trainee.

Organization and Governance

15. An ideal CVE program has a school or departmental advisory committee contributing frequently to each of the vocational program areas. The advisory committee meets at least twice per year to give input to the school about training programs.

16. Support and commitment by the school administration to the Cooperative Education program is a necessity. Ninety percent of the teachers in the study indicated the importance of a positive relationship with the school administration in conducting successful cooperative programs. An example would be the principal providing visual support by attendance at an employer-employee banquet sponsored by the local high school such as FBLA or FFA.

17. Components of the ideal CVE program include a strong vocational student organization committed to developing and enhancing the students leadership ability.

Special Populations

In some cases the following additional conclusions suggest the need for improvement in meeting the goal of the ideal CVE program.

18. Teacher-coordinators in general have developed plans for and are rolling disadvantaged students into their cooperative programs.

19. The larger majority of teacher-coordinators (87 percent) are not enrolling or dealing with handicapped students as part of the cooperative program.
20. Certain patterns did not emerge when relating to the areas of youth unemployment and areas that have high rates of school dropouts. It can be concluded that some schools are meeting expectations spelled out in the 1976 Educational Amendments under Cooperative Vocational Education for school dropouts and youth unemployment. A larger number of school and/or teacher-coordinators however have not become sensitive to this problem in general.
21. Teacher-coordinators do not, in general, share with students the written measurable objectives that they have delveloped for their Cooperative Vocational Education programs.
22. There was an unusually large number of females involved in the study population. However, the vocational programs in which students were entered were traditionally female. Legislation over the past decade has encouraged a more equal representation of both sexes in traditionally all male or all

female occupations. It is apparent from this study that few gains have been made in federal directives prepared to equalize the ratio in traditionally male and female occupations.

23. Ethnic groups by percentage of the total student population were equally well represented in the study.

RECOMMENDATIONS

The recommendations that follow are a result of the data collected from each of three survey instruments used to determine the status of Cooperative Vocational Education in selected programs.

1. Length of contract time for teacher-coordinators--The state of Virginia employ their teacher-coordinators for eleven or twelve month contracts according to those completing the teacher-coordinator questionnaire. The other four states participating in the study hire their coordinators for ten months or longer. Studies on CVE in past years indicated that teacher-coordinators received contracts similar to other teachers or for a period of nine months. It is recommended for policy consideration that state departments of education and local education agencies, because of the unique nature of the coordinators duties, hire teacher-coordinators on not less than ten month contracts. Where teacher-coordinators duties warrant additional time beyond the ten month contract, consideration should be given to these needs individually.

2. Percentage of time allotted to coordination--In the States of Ohio and Oklahoma the large majority (80 percent) of the teacher-coordinators spend 100 percent of their time in duties relating to coordination for the cooperative program according to the study. Arizona, Minnesota, and Virginia indicate that teacher-coordinators spend 65 percent or more of their time in the role of teacher-coordinator with the balance being spent in the classroom setting. It is recommended for policy consideration by local education agencies that at least 65 percent of the teachers's contract day be devoted to coordination responsibilities with the balance of the contract time allowing the teacher to maintain sufficient contact time in the classroom setting.

3. Percentage of time allotted to the related class--The State of Virginia teacher-coordinators spend over twice the number of teaching hours in the related class each week than do coordinators of the other four states. Because of the importance of the related class and it direct relationship to the cooperative program it is recommended for consideration to state departments of education and local education agencies that the related class be given the time allocation (not less than five hours per week) for the express purpose of providing the bridge needed by students between vocational classroom training and the world of work. (See number 10 under conclusions section for specific content of the related class.)

4. Length of time cooperative program has functioned--The average number of years of operation for cooperative programs in this study of successful Cooperative Vocational Education was thirteen years. Few quality programs have been operating for less than three years, some being in existance for more than thirty years. The study confirms that Cooperative Vocational Education programs need sufficient time to develop before relationships between school, business, and the community develop sufficiently for a strong program to flourish. It is recommended that local administrators provide sufficient time for a quality CVE program to develop in order to reap the benefits of this method of vocational instruction.

5. Reporting procedures--One of the findings not fitting into a pattern was the teacher-coordinator reporting procedure. Forty-six percent of the coordinators report to the principal concerning their activity while 35 percent report to their department chairman. School size was not a determining factor for teacher reporting procedures. Further research should be undertaken to determine what additional value is gained by having teacher-coordinators report to the principal instead of the line supervisor normally considered to be the department chairman.

6. Teacher-coordinator-counselor-relationship--According to teacher-coordinator responses, 60 percent felt that they needed more support from school counselors. One of the concerns cited was the

lack of familiarity that counselors have with the purpose of the cooperative education program. As a policy recommendation to local administration a more intensive effort should be undertaken by administration, counselors, and teacher-coordinators to cooperate and communicate on the goals of the cooperative program.

7. Teacher-student ratio--Additional research is needed to confirm the number of students that one coordinator can supervise per hour of release time. Although this study found that the average coordinator was working with eleven students per hour of release time, there were a number of coordinators that had as many as forty-five students per hour of release time. Such research should seek to determine the time needed for the average coordinator to recruit students, develop curricula, teach classes, develop training stations, monitor student progress at training stations, and compile necessary data, including follow-up of formerly enrolled students in the Cooperative Vocational Education program.

8. More effective follow-up procedures--Teacher-coordinators agreed that student follow-up was one of the weakest components in the cooperative program. It is recommended that state administrators of Cooperative Vocational Education programs adopt policy strongly encouraging follow-up on all cooperative education graduate for five years after graduation.

This effort should be done on a school wide basis using counselors and teacher-coordinators. The information obtained from such students could be used to improve local programs and curriculum materials.

9. Strengthen advisory committee roles--Study results indicated that advisory committees have been helpful in improving school vocational programs although limited in the number of times in which they meet each year.

A policy recommendation is that the advisory committees meet more frequently and with more focus on their responsibilities in order for the effectiveness of the committees to improve.

10. Additional and directed funding for Cooperative Vocational Education--This study confirms previous research efforts substantiating the effectiveness of Cooperative Vocational Education programs in the United States.

Cooperative education appears to be meeting intended objectives as highlighted in the 1968 and 1976 Vocational Education Amendments. The cooperative programs are generating support from training sponsors, participating students, teacher-coordinators, and administrators. It is apparent that the cooperative method could serve far greater numbers of students if additional funding were available to support such programs. It is recommended that Congress and state legislatures look carefully at the outcomes produced by this method of vocational education instruction and act accordingly with specific funding directed to these programs.

11. Placement services--Only 32 percent of the teacher-coordinators indicated their school had any form of a placement program for students seeking full-time employment upon completion of the students

cooperative training. It is recommended for policy consideration that such a service be provided by each high school for the benefit of those students who wish to enter the labor market directly upon graduation from high school.

12. Special populations--Teacher-coordinators in this study indicated that they are doing some work with disadvantaged students in cooperative programs. Little effort is being expended however in the area of the handicapped. Two recommendations are given. First, that teacher-coordinators be given inservice training by the school district or by the state department on how to work with handicapped students in cooperative programs. Second, that teacher-coordinators promote, within their regular vocational classes the opportunities for students fitting the definition of the handicapped to become involved in the Cooperative Vocational Education program.

13. High youth unemployment and school dropouts--The majority of high schools included in the study have not developed plans to meet federal cooperative guidelines relating to the areas of the potential dropout and where high unemployment exists. It is recommended that administrators who supervise cooperative programs be encouraged to develop specific guidelines that will provide opportunities for students fitting the above two categories to become participants in Cooperative Vocational Education.

14. Follow-up study--A follow-up study is needed to determine patterns of the 126 students involved in this study. Objectives of this study would include--

a. Measurement of the program outcomes by determining employment or other status of the former cooperative education student;

b. Determination of wage levels, job satisfaction, and/or school satisfaction as it relates to prior school and job training.

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APPENDIXES

APPENDIX A

LIST OF STATES WHICH PARTICIPATED IN THE STUDY

ARIZONA

MINNESOTA

OHIO

OKLAHOMA

VIRGINIA

Appendix B

Exhibit 1

November 22, 1980

Dear _____:

Thank you for agreeing to serve as a member of this jury for the beginning of a National Study on Cooperative Vocational Education.

The study being conducted is entitled, "An Evaluation of Secondary Cooperative Vocational Education programs since the passage of the 1976 Vocational Education Amendments."

We are interested in determining what states are successfully using the criteria listed (see attached page) for their Cooperative Vocational Education Programs.

It is understood that there are many kinds of good work experience programs being conducted across the country. This study will attempt to describe only those programs across the country meeting the criteria as listed to determine the best models available in Cooperative Vocational Education.

It is recognized that additional criteria other than that listed on the attached page may strengthen a Cooperative Vocational Education Program but we request you consider at least all the criteria listed here in making your selection of the five states in your opinion, who are performing at the highest level in Cooperative Vocational Education.

Please rank the state receiving your highest priority with a number one in the box to the left and continue your ranking of states through number five.

It is understood that you may be ranking states because of your own experience within an individual vocational program area. Where possible you may be able to rate states also across more than one program area.

Upon completion of your ranking please send your response in the enclosed self-addressed envelope.

Again, thank you for agreeing to be a part of this select jury and for completing the ranking sheet.

Sincerely,

Gary M. Lloyd, Project Director
National Study Cooperative Vocational Education

Exhibit 2

COOPERATIVE VOCATIONAL EDUCATION PROGRAMS

IN THE UNITED STATES

Please list, from your own personal experience, the states which currently have the best Cooperative Vocational Education Programs. Rank one to five with one being the state which has the best Cooperative Vocational Education Programs according to the criteria established on Page 1.

( ) Alabama	( ) Maine
( ) Alaska	( ) Maryland
( ) Arizona	( ) Massachusetts
( ) Arkansas	( ) Michigan
( ) California	( ) Minnesota
( ) Colorado	( ) Mississippi
( ) Connecticut	( ) Missouri
( ) Delaware	( ) Montana
( ) District of Columbia	( ) Nebraska
( ) Florida	( ) Nevada
( ) Georgia	( ) New Hampshire
( ) Hawaii	( ) New Jersey
( ) Idaho	( ) New Mexico
( ) Illinois	( ) New York
( ) Indiana	( ) North Carolina
( ) Iowa	( ) North Dakota
( ) Kansas	( ) Ohio
( ) Kentucky	( ) Oklahoma
( ) Louisiana	( ) Oregon

( ) Pennsylvania

( ) Rhode Island

( ) South Carolina

( ) South Dakota

( ) Tennessee

( ) Texas

( ) Utah

( ) Vermont

( ) Virginia

( ) Washington

( ) West Virginia

( ) Wisconsin

( ) Wyoming

Name _____

Address _____

_____

Phone # _____

Check below if you wish to see the results of the study scheduled for completion June, 1981.

( )

Exhibit 3

Please indicate the Vocational Program Area where you feel you have the greatest expertise. (You may mark more than one area).

( ) Agriculture

( ) Business Education

( ) Health Education

( ) Home Economics

( ) Marketing and Distributive Education

( ) Trade and Industrial Education

( ) Technical Education

( ) Business or Industrial Representative

( ) All Vocational Program Areas

Name _____

Position _____

Location _____

Exhibit 4

CRITERIA USED FOR NATIONAL STUDY ON COOPERATIVE VOCATIONAL EDUCATION

The study includes the vocational education program area of agriculture education, business education, health education, home economics education, marketing and distributive education, trade and industrial education, and technical education.

The definition of Cooperative Vocational Education used in this study is the one used in the 1963 Vocational Act as well as the 1968 and 1976 Vocational Education Amendments. The following criteria taken primarily from the acts and amendments is the basis for selection of states that are to participate in the National Study:

Cooperative Vocational Education uses the capstone approach--that is, where the student receives one or more years of inschool vocational training prior to the cooperative experience in his or her speciality area. Cooperative Vocational Education then becomes the rounding out or finishing process for the student.

Students participating in Cooperative Vocational Education Programs are paid at least the legal minimum wage or student learner rate established by the Department of Labor. They also receive school credit for participating in the cooperative program.

The training station is selected with care by the school (usually by the teacher-coordinator) to assure that the training sponsor understands the objectives of the Cooperative Vocational Education Program and will assure that students are provided a variety of experiences which will coincide with their vocational program training at school.

A training plan is completed and signed by the employer, student and school, identifying the job site activities that the student will be involved with.

A training agreement, also signed by the employer, student, and school spells out the time of day in which the student will be employed, the hourly wage, length of employment, immediate supervisor, etc.

The student and/or immediate supervisor of the student are visited by the teacher-coordinator at the training station at least every six weeks for purposes of coordination of the overall program. This visit also serves the purpose of determining if the student is meeting all objectives indicated in the training plan if additional training is necessary for the student in the related theory class at the high school.

CRITERIA USED FOR NATIONAL STUDY ON COOPERATIVE VOCATIONAL EDUCATION
(con'd)

The teacher-coordinator is given sufficient release time from teaching responsibilities to effectively coordinate the Cooperative Vocational Education Program and the teacher-student ratio is not greater than 25 to 1 per hour of release time.

A related vocational theory class consisting of the teaching of work attitudes, employer-employee work relations, human relations, and job application techniques as well as some skill training, are a critical part of the Cooperative Vocational Education Program. This class will generally be taught by the teacher-coordinator whose certification is common to all students in the class.

The 1976 educational amendments also clarify the need for Cooperative Vocational Education Programs to include students with special needs. Equal treatment is also required for minority students and all ethnic groups. This study seeks to identify students in these categories in each of the final five states selected to participate in the national study.

Priority for federal funding of these programs under the 1976 amendments must be given to areas with high rates of school dropouts or youth unemployment. States are to assure that students in non-profit private schools may participate in Cooperative Vocational Education Programs.

Appendix C

Exhibit 1

February 20, 1981

Dear _____:

I appreciated talking with you by phone this week and to review with you in brief the National Study being conducted on cooperative vocational education.

This letter is written to confirm information about the study and to clarify Ohio's role as a participant of the study

The study as I had indicated to you by phone is an outgrowth of conversations over the past several months held with the U.S. Office of Education concerning the validity of cooperative vocational education programs as we now operate them. An agreement to begin the study culminated in early September of this past year with the title to the study being, An Assessment of Secondary Cooperative Vocational Education Programs since the Educational Amendments of 1976. Our attempt is not to compare cooperative vocational education with other work experience programs but rather to determine the strength of present vocational cooperative education programs that are currently being run at the secondary level in the country.

A national jury of twelve specialists in the field of cooperative vocational education were asked to select five states in the country that were doing the best job in cooperative vocational education according to criteria given them. In early January of this year we received information back from the select jury on those states they considered to be doing the most complete job on cooperative vocational education.

After reviewing the recommendations made by the jury members we were pleased to see that Ohio was one of the five states selected for consideration in the study; the other four states were Arizona, Minnesota, Oklahoma, and Virginia.

As I indicated to you we are contacting each of the five states to gain their cooperation in conducting the study. The following is needed from you in the state of Ohio:

1. The selection by you of an individual or individuals that can conduct a survey with teacher coordinators in five small school

districts, five medium school districts, and five large school districts, keeping in mind the importance of trying to cover as many vocational areas as possible in the selection of the teacher coordinators who will be part of the study.

2. I will need to come to a location designated by you to meet with those you would approve to assist with the study. The purpose of my trip will be to give inservice training to those who will visit onsight with teacher coordinators in the administration of the questionnaire. I would anticipate that this inservice meeting would take approximately two hours. In trying to coordinate the dates in which I will be in all five of the states to inservice the interviewers I have selected dates that will hopefully meet your schedule and also one or two alternate dates that might be considered as well. At this time I would like to consider the date of Thursday, March 26 as the first date in which I would be at he place designated by you to work with the interviewers and alternate dates of April 1 or 2.

3. We ask that the interviewers complete their interviews with the teacher coordinators on or before the twentieth of April and to have those returned to this office for tabulation along with the other four states who will be meeting similar deadlines, to assist with the study.

4. We ask that you select the schools and teacher coordinators and have the names of the schools and coordinators returned to this office by Tuesday, March 3. By that date we would also appreciate it if you could have confirmed the best date to meet with your interviewers of the ones suggested above.

Mrs. Marion Kraft from the Department of Education in Washington has worked closely with us in the development of the National Study. The results of the study will be sent to all states and will be included as part of a National Study on Vocational Education that is being conducted by the National Institute of Education. Your participation and support in the

---

study will assure a quality outcome for the criteria to be used in the study (see the attached). Thanks again for your assistance and I look forward to hearing from you.

Sincerely,

Gary M. Lloyd, Project Director
The National Center for Research
in Vocational Education
Advanced Study Center
1960 Kenny Road
Columbus, Ohio 43210

GML/cc

Enclosure

Exhibit 2

Information and Instructions to Interviewers

In order for this National Study to maintain continuity across each of the five states, we request that you follow each of the Interviewer Instructions.

1. Although the questionnaire could be filled out in many cased by the teacher coordinator alone, we ask that you work jointly with each coordinator throughout the completion of the questionnaire.

2. Please be certain that the answer given for each question is the sole decision of the teacher-coordinator.

3. Care should be taken by the Interviewer to create the climate whereby the coordinator can be at ease and be free from distractions during the interview.

4. If it should become necessary to interview a teacher-coordinator at a site away from their high school and classroom setting, please be sure that the teacher-coordinator brings a copy of their cooperative program goals and standards. Certain questions on the instrument request the coordinator to list these goals or standards, if developed.

5. Information from previous years is also requested on the questionnaire. Invite the teacher coordinator to have available. information relating to previous enrollments of students who participated as a coop student in their department.

6. Three questionnaires will be provided to the interviewer for each teacher coordinator. One copy is to be left with the coordinator at the conclusion of the interview. The second copy is to be used by the coordinator for completion. The third copy is to be used by the interviewer and in case the coordinator errors in filling out his instrument.

7. Your assistance in serving as the interviewer is greatly appreciated and will expediate the handling of the questionnaire back to the Project Director.

8. This method of interviewing is consistent in each of the five states where the study is being conducted thereby providing consistency and hopefully further reliability of the study results due to the method being used.

Information and Instructions to Interviewers (con't)

9. We ask that you complete your interviews within two weeks after you meet with the Project Director and return the questionnaires directly back to:

Gary M. Lloyd
Project Director
The National Study Cooperative Vocational Education
Advanced Study Center
The National Center for Research in Vocational Education
The Ohio State University
1960 Kenny Road
Columbus, Ohio 43210

Exhibit 3

INFORMATION AND INSTRUCTIONS TO TEACHER-COORDINATORS PARTICIPATING IN THE NATIONAL STUDY ON COOPERATIVE VOCATIONAL EDUCATION

Your state has been selected as one of five states in the country to be included in a National Study on Cooperative Vocational Education.

Your High School and particularly you, were selected by the state department to participate in the study because you are operating a cooperative vocational education program that meets or exceeds criteria which was established for cooperative vocational education programs by the Congress of the United States in the 1963 Vocational Educational Act as well as the 1968 and 1976 Vocational Education amendments.

The specific objectives of this study are:

1. To determine the degree to which secondary cooperative vocational education is a viable educational training program.

2. To review the effectiveness of the federal role in supporting cooperative vocational education through the 1976 educational amendments which provide optional funding under a basic grant to each state.

3. To assess the degree of priority given by the states to the 1976 educational amendments to cooperative vocational education to areas with high rates of school dropouts or youth unemployment.

4. To locate "models" of cooperative vocational education programs across the country at the secondary education level for those wishing to develop strong CVE programs.

INSTRUCTIONS YOU WILL FIND HELPFUL AS YOU PARTICIPATE IN THE NATIONAL STUDY

1. A representative of the state department will meet with you for approximately thirty minutes to gain your assistance in answering questions relating to the National Study. We gratefully acknowledge your participation in the study.

2. If your school or department has developed goals and/or standards for cooperative vocational education, please bring these with you to the interview. (An additional copy of these goals would be most helpful to be attached to your questionnaire if possible.)

3. If your school or department has kept records on students who have enrolled in cooperative vocational education over the past three years, we would appreciate you having access to these records. (One question requests the number of students who were enrolled in your cooperative program within your department during the school years from 1976 through 1979.)

4. Please have available your current school enrollment-grades 10-12.

5. When handing out the student questionnaire, give to Senior Students only.

Appendix D

Confidential:
For Research use only

SET I

NATIONAL STUDY - COOPERATIVE VOCATIONAL EDUCATION

1/1:1-4 NUMBER A _____

MARCH - APRIL

1981

TO: Teacher-coordinators of cooperative vocational education

Thank you for agreeing to be a part of the National Study.

Fifteen high school programs from each of five states are part of the National Study. Each of these programs are considered to be some of the best in each state and each of the five states were selected to participate because co-op is succeeding well in each of those states.

The study cuts across all program areas in vocational education.

Please consider each of your responses to the questions that are asked, carefully and thoughtfully.

The questionnaire should not take more than 30 minutes of your time with, the interviewer, to complete.

The interviewer was carefully selected because of his or her expertise in cooperative vocational education. Please rely on them to assist you in clarifying any questions you may have relating to the study.

We are pleased to have you join as one of seventy-five individuals who will be participating across the country in this most important National Study.

This information is CONFIDENTIAL; no data will be associated with the name of the individual.

STATEMENT ABOUT THE STUDY:

This study is designed to determine what "is", rather than what, "should be". Therefore, please answer the questions on the basis of what you actually do rather than on the basis of what you think should be done.

If you would like a summary of the results of this study, please indicate in the space provided at the end of the questionnaire.

DEFINITIONS:

In order to assure uniformity of responses, please refer to the following definitions:

Cooperative Vocational Education - A program of vocational education for persons who, through written cooperative arrangements between the school and employers, receive instruction, including required academic courses and related vocational instruction by alternation of study in school with a job in any occupational field, but these two experiences must be planned and supervised by the school and employers so that each contributes to the student's education and to his or her employability. (P.L. 94-482)

Training Agreement - A document signed by the student, employer, and teacher-coordinator clarifying the responsibilities of each and defining the length, time and hours, and rate of pay for the work experience.

Training Plan - Determines the specific learning experiences which will be provided on the job and the specific related learning which will be covered in school.

Teacher-Coordinator - The member of the school faculty who teaches and supervises the students participating in a cooperative education program.

Training Station - The location of the work and the employer cooperating with the school in the cooperative education program.

Training Sponsor - The job supervisor who is directly responsible for the training and supervision of the student-trainee.

Number of students in school _____

Today's Date_____

DISTRICT

District Name _____

Superintendent_____

Number of high schools in district_____

In terms of comparing your school size to others in the district, is your school in the

Larger 1/3 _____

Medium 1/3 _____

Smaller 1/3_____

QUESTIONNAIRE FOR COOPERATIVE VOCATIONAL EDUCATION STUDY

TEACHER-COORDINATOR QUESTIONNAIRE - SECONDARY PROGRAMS

Please indicate the vocational program area where you spend the majority of your teaching/coordinating time by checking (√) one of the following.

a. ____ Agriculture

b. ____ Business & Office

c. ____ Distributive Education

d. ____ Health Education

e. ____ Home Economics

f. ____ Trade & Industrial

g. ____ Technical education

Official title of program (e.g., Cooperative Office Education, etc.)

_____.

Name of Respondent_____

Title of Respondent_____

Office Telephone Number_____
area code number extension

Please complete the following information relating to your school and district:

SCHOOL

School Name_____

Complete Address_____

_____

1. How long has your cooperative vocational education program been operating within the department?

   _____years.

2. How long have you been a teacher-coordinator?

   _____years (if less than one year-mark one year)

3. As a teacher-coordinator, what is the title of the person to whom you report? (If you have an organization chart please attach it to this questionnaire.)

   _____(e.g., Dept. Chairman, School Coop Dir., Counselor).

4. If you coordinate more than one vocational program area in cooperative education indicate each one below:

   a. ____ Agriculture

   b. ____ Business & office education

   c. ____ Distributive Education

   d. ____ Health

   e. ____ Home Ec.

   f. ____ Trade & Industrial

   g. ____ Technical Education

5. During the last three years, how many inservice classes or workshops on cooperative vocational education have you attended?

   a. ____ Four or more

   b. ____ Three

   c. ____ Two

   d. ____ one

   e. ____ None

6. Did you attend any workshops or inservice classes on vocational education where units of instruction related to Co-op?

   a. ____ Yes

   b. ____ No

7. To what extent have these classes or workshops on coop been productive for you:

   a. ____ Excellent

   b. ____ Good

   c. ____ Fair

8. As a teacher-coordinator, do you coordinate:

   a. ____ As part of your contract day

   b. ____ On an extended day - beyond the regular day with additional pay

   c. ____ On an extended day - beyond the regular day with no additional pay

   d. ____ Other (Please explain)_____

   _____

9. Of the hours you spend on coordinating activities per week, how many of those are spent:

   Providing training, in the classroom setting, to cooperative students?

   a. _____ Hours per week

   Talking with the students about specific job opportunities?

   b. _____ Hours per week

   Contacting employers about job openings for students?

   c. _____ Hours per week

   Conducting follow-up of former students?

   d. _____ Hours per week

   Keeping records and reporting activities?

   e. _____ Hours per week

   Other; Please specify:_____

   _____

   f. _____ Hours per week

   _____

10. As a teacher-coordinator do you receive:

   a. _____ Reimbursement for local mileage in coordination with duties.

   b. _____ No reimbursement for milleage in connection with coordination duties

   c. _____ Other (Explain)_____

   _____

   _____

11. What percent of your contract time is allocated to the role of teacher coordinator for cooperative vocational education during the school year?

a. ____ 10%
b. ____ 20%
c. ____ 30%
d. ____ 40%
e. ____ 50%
f. ____ 60%
g. ____ 70%
h. ____ 80%
i. ____ 90%
j. ____100%

12. List other teaching assignments you have this school year.

_____
_____
_____
_____
_____
_____

13. In your role as teacher-coordinator, what percent of the students that you coordinate, do you teach in the formal classroom setting?

a. ____100% to 76%
b. ____ 75% to 51%
c. ____ 50% to 26%
d. ____ 25% to 1%
e. ____ None

14. Please list the school contract time you are employed as a teacher-coordinator this year: (e.g., 3 Months, 6 months, etc.)

_____

15. How many students do you coordinate in your co-op program?

_____.

16. How many hours of release time are you given each day for coordination?

_____.

17. Have you developed measurable program objectives for your departments' cooperative program this year?

a. ____ Yes

b. ____ No

18. As a basis for evaluating student performance, have you developed specific written measurable objectives for students enrolled in your cooperative program?

a. ____ Yes

b. ____ No

1. If your answer to the above question was yes, are the students aware of these objectives?

a. ____ Always

b. ____ Usually

c. ____ Sometimes

d. ____ Seldom

e. ____ Never

2. Are these objectives shared with your training sponsors?

a. ____ Always

b. ____ Usually

c. ____ Sometimes

d. ____ Seldom

e. ____ Never

19. Do you use training plans for cooperative students under your direction? (By definition the training plan determines, with the student, the needed learning experiances which the training sponsor will support).

a. ____ Always

b. ____ Usually

c. ____ Sometimes

d. ____ Seldom

e. ____ Never

20. Do you use training agreements for cooperative students under your direction? (By definition the training agreements determines, with the student, school and training sponsor the wages, work schedule, and agreements with the school, sponsor and student).

a. ____ Always

b. ____ Usually

c. ____ Sometimes

d. ____ Seldom

e. ____ Never

21. In the following list, please check all assignments you perform as a teacher-coordinator:

a. ____ Establish guidelines for the cooperative education program

b. ____ Enroll Students in the cooperative program

c. ____ Teach related class

d. ____ Assist student to locate training station

e. ____ Work with student in completing training plan

f. ____ Work with student in completing training agreement

g. ____ Place students on the job

h. ____ Manage the attendance, transfers, and terminations of co-op students

i. ____ Call on employer periodically for student evaluation

j. ____ Evaluate students who are in the program

k. ____ Supervise employer-employee appreciation event

l. ____ Advise student vocational organization (i.g., VICA, FBLA, DE, ETC.)

m. ____ Other (Indicate additional assignments you perform as a teacher-coordinator.)

_____

_____

22. Please check any of the following that are included in the procedures you use to select training stations for your program:

a. ____ Visit place of business and select training station

b. ____ Phone contact

c. ____ Requests by letter

d. ____ Receiving lists of training stations from school coop director or counselor

e. ____ Receiving lists of training stations from district coop director

f. ____ Contact employment security or job service

g. ____ Other (please indicate)_____

_____

23. What method do you provide for training sponsors to screen your students for part-time employment?

a. ____ I ask the sponsor what type of student they are looking for and send two or more students and have them make the selection.

b. ____ I ask the sponsor what type of student they are looking for and then select one of my students to send the sponsor.

c. ____ Other (Please describe if different from above)

24. What method do you use for career counseling the cooperative vocational education students in your department? (check all that apply)

a. ____ Group counseling

b. ____ Individual Counseling

c. ____ None

d. ____ Other (Please clarify)

_____

_____

25. How many cooperative students have met with you in counseling this year?

a. ____ Group (number)

b. ____ Individual (number)

c. ____ None

d. ____ Other

26. During the school year periods from 1977-1980, please complete the following, relating to the number of students who were or are in your department as cooperative vocational education students.

	Students	Male	Female	Breakdown by number
1977-78	____	____	____	172/4:24-25 ____ White 173/4:26-27 ____ Black 174/4:28-29 ____ Oriental 175/4:30-31 ____ Hispanic(Chicano, P. Rican, etc.) 176/4:32-33 ____ American Indian 177/4:34-35 ____ Other (specify)
1978-79	____	____	____	178/4:36-37 ____ White 179/4:38-39 ____ Black 180/4:40-41 ____ Oriental 181/4:42-43 ____ Hispanic 182/4:44-45 ____ American Indian 183/4:46-47 ____ Other (specify)
1979-80	____	____	____	184/4:48-49 ____ White 185/4:50-51 ____ Black 186/4:52-53 ____ Oriental 187/4:54-55 ____ Hispanic 188/4:56-57 ____ American Indian 189/4:58-59 ____ Other (specify)
1980-81	____	____	____	190/4:60-61 ____ White 191/4:62-63 ____ Black 192/4:64-65 ____ Oriental 193/4:66-67 ____ Hispanic 194/4:68-69 ____ American Indian 195/4:70-71 ____ Other (specify)

If you were not a teacher-coordinator during all of the above years try to furnish the information to the best of your knowledge, relating to departmental information if available.

27. In order for a student to be admitted to your cooperative program please check the following:

The student must be in at least

a. ____ Grade 11

b. ____ Grade 12

The age of the student must be at least

a. ____ 15 years old

b. ____ 16 years old

c. ____ 17 years old

The student has an occupational or vocational intent

a. ____ Always

b. ____ Most often

c. ____ Sometimes

d. ____ Seldom

e. ____ Never

28. Please indicate by the following choices, how you receive students into your cooperative program: (check all choices that apply)

a. ____ School Counselor places them in your program upon your approval.

b. ____ School counselor places them in your program without consulting with you.

c. ____ Students contact you directly without school counseling.

d. ____ Other

If other, please explain briefly_____

_____

_____

29. The following is a list of program requirements for cooperative vocational education. Please check whether or not you require these of students entering your cooperative program:

a. Students receive one or more years of inschool vocational training prior to the cooperative experience in his or her speciality area.

____ Yes

____ No

b. Students participating in the vocational cooperative program are paid at least the legal minimum wage or student learner rate established by the department of labor.

____ Yes

____ No

c. A training plan is completed and signed by the employer, student and school, identifying the job site activities that the student will be involved with.

____ Yes

____ No

d. A training agreement, also signed by the employer student, and school spells out the time of day in which the student will be employed, the hourly wage, length of employment, etc.

____ Yes

____ No

e. The student and/or immediate supervisor of the student are visited by the teacher-coordinator at the training station at least every six weeks for purposes of coordination of the overall program.

____ Yes

____ No

f. The teacher-coordinator is given sufficient release time from teaching responsibilities to effectively coordinate the cooperative vocational education program.

____ Yes

____ No

g. The teacher-student ratio is not greater than 25-1 per hour of release time.

____ Yes

____ No

h. Other (Please add anything that may clarify your answers as checked above. _____

_____

30. Do students enrolled in cooperative programs receive training in a related instruction class?

a. ____ Yes

b. ____ No

If your answer was yes, please check the methods of instruction that the students receive:

a. ____ Lectures

b. ____ Programmed Instruction

c. ____ Informal non-teacher centered instruction

d. ____ Individual or small groups

e. ____ Large group instruction

f. ____ Role playing

31. In terms of content, students receive instruction in the following: (check all that apply)

a. ____ Employer-employee relationships

b. ____ Communications skills

c. ____ Methods of dress

d. ____ Payroll Procedures

e. ____ Academically related instruction

f. ____ Employer-customer relationships

g. ____ Information on current technology

h. ____ Economic information

i. ____ Vocational skill training

j. ____ Attitudes

k. ____ Other (please list) _____

_____

32. What percent of time does the majority of students who are enrolled in your cooperative program spend in school and on the job?

a. In school _____%

b. On the job _____%

33. How many of your students receive: (list number)

____ Minimum wage

____ Student learner wage

____ No wage

34. What influence has the cooperative program had on students regarding:

Motivation

a. ____ Great deal of influence

b. ____ Some influence

c. ____ Little influence

d. ____ Undetermined influence

e. ____ No influence

Absenteeism

a. ____ Great deal of influence

b. ____ Some influence

c. ____ Little influence

d. ____ Undetermined influence

e. ____ No influence

Grades

a. ____ Great deal of influence

b. ____ Some influence

c. ____ Little influence

d. ____ Undetermined influence

e. ____ No influence

Other (Please explain)_____

_____

_____

35. To what degree has your cooperative vocational education program directly influenced some students to remain in school rather than drop out?

a. ____ A great deal of influence in holding students.

b. ____ Some influence in holding students

c. ____ Little influence in holding students

d. ____ No influence in holding students

e. ____ An undetermined influence in holding students

36. Are there placement services provided within the school for students who wish to seek full time employment upon completion of their cooperative training at the high school?

a. ____ A placement is provided for all students seeking full time employment.

b. ____ A limited placement program is available for those students who have received vocational or career training.

c. ____ No placement service is provided.

d. ____ Other_____

_____

37. Have some students dropped out or been terminated from the cooperative program this year?

a. ____ Yes

b. ____ No

If your answer to the above question was yes, how many? _____.

38. Were the following, reasons why students left cooperative program?

a. Would not follow program requirements

____ Yes

____ No

b. Had to change because of a schedule conflict

____ Yes

____ No

c. Employer terminated employment of student

____ Yes

____ No

d. Teacher-coordinator terminated student from program

____ Yes

____ No

e. Student lost interest in program

____ Yes

____ No

f. Student terminated program for personal reasons

____ Yes

____ No

g. Other (Please list additional reasons for the student leaving the cooperative program)_____

____ Yes

____ No

39. Please describe the follow-up program for students formerly enrolled in your cooperative program by selecting one of the following options:

a. ____ Contact of student is made by: Administration (School Coop Coordinator, etc.)

b. ____ Contact of student is made by: District

c. ____ Contact of student is made by: School counselor

d. ____ Contact of student is made by: Department

e. ____ Contact of student is made by: Teacher-coordinator

f. ____ We do not presently follow-up former students

g. ____ I am not acquainted with the process used

40. How often if follow up program conducted in your school for graduating students of cooperative vocational education:

a. ____ Every year

b. ____ Every Two years

c. ____ Every five years

d. ____ I do not know

41. Do you have provisions in your schools cooperative vocational education program for special populations, (Disadvantaged, handicapped, etc.):

a. ____ Yes

b. ____ No

If yes, please provide your answer for those provisions

_____

_____

42. How many disadvantaged and handicapped students are enrolled in your cooperative program this year?

a. ____ Disadvantaged

b. ____ Handicapped

Areas that have high rates of school dropouts and youth unemployment, receive high priority for funding cooperative vocational education. Programs at the federal level.

43. What has your school cooperative vocational program done to meet the requirements of the federal law?

a. ____ We do have a plan and are concentrating on these two areas.

b. ____ We do not have plan at this time to serve these students.

If you checked a above, identify the number of students who are in your program who are potential dropouts_____

44. Please describe the facilities used by your department program for cooperative education as they relate to current needs of business and industry:

GOOD FEATURES	POOR FEATURES
SCHOOL TRAINING FACILITIES	
A. _____	A. _____
_____	_____
_____	_____
ON-SITE TRAINING STATIONS	
B. _____	B. _____
_____	_____
_____	_____

45. To what extent has the vocational advisory committee contributed to program improvement in your area?

a. ____ Very frequently

b. ____ Frequently

c. ____ Sometimes

d. ____ Rarely

e. ____ Never

46. How many times has your school vocational advisory committee met this current school year?

a. ____ Three or more times

b. ____ Twice

c. ____ Once

d. ____ None

e. ____ Do not have one

47. If your opinion, to what extent have unions assisted your cooperative vocational education program?

a. ____ Most helpful in helping our program to increase in size

b. ____ Somewhat helpful in assisting our program to increase in size

c. ____ No visible assistance from unions that we can determine to assist our programs to increase in size

d. ____ Unions have hindered program improvement

Comment: _____

_____

48. Because your school has been identified as having a model cooperative vocational education program, please briefly name the most interesting and unusual feature(s) of your cooperative vocational education program:

_____

_____

_____

_____

49. Please briefly list the main reasons for the degree of success that has been achieved by your cooperative vocational education program?

_____

_____

_____

_____

50. What problems need to be resolved in your cooperative vocational program?

Comment: _____

_____

_____

51. On a 5-point scale from poor to excellent, with 1 for poor and 5 for excellent, rate your cooperative program on each of the following : (✓)

	Poor 1	2	Average 3	4	Excellent 5	Don't Know	Not Applicable
a. Student enthusiasm toward cooperative program	☐	☐	☐	☐	☐	☐	☐
b. My enthusiasm toward cooperative program	☐	☐	☐	☐	☐	☐	☐
c. Quality of training sponsor supervision	☐	☐	☐	☐	☐	☐	☐
d. Relevance of training to real world working conditions	☐	☐	☐	☐	☐	☐	☐
e. Cooperation of training sponsors	☐	☐	☐	☐	☐	☐	☐
f. Cooperation of unions	☐	☐	☐	☐	☐	☐	☐
g. Intellectual ability of students in their field	☐	☐	☐	☐	☐	☐	☐
h. Recruitment of students	☐	☐	☐	☐	☐	☐	☐
i. Job success of students in program	☐	☐	☐	☐	☐	☐	☐
j. Counseling within the department for coop student	☐	☐	☐	☐	☐	☐	☐
k. Placement of students in same area of training after program completion.	☐	☐	☐	☐	☐	☐	☐
l. Students continuing post secondary training in same area as received in high school	☐	☐	☐	☐	☐	☐	☐
m. Follow-up on former students	☐	☐	☐	☐	☐	☐	☐
n. Job success of students completing program	☐	☐	☐	☐	☐	☐	☐
o. Overall quality of cooperative program	☐	☐	☐	☐	☐	☐	☐
p. Active use of vocational advisory committees	☐	☐	☐	☐	☐	☐	☐
q. Support of other faculty within department of program	☐	☐	☐	☐	☐	☐	☐
r. Administrative support of the cooperative program	☐	☐	☐	☐	☐	☐	☐
s. Administrative commitment to cooperative education	☐	☐	☐	☐	☐	☐	☐

Thank you for assisting in this national study on cooperative vocational education.

Please check the box below if you desire a summary of the study.

☐

☐ Please indicate the length of time it took to complete this questionnaire

Appendix E

NATIONAL STUDY - COOPERATIVE VOCATIONAL EDUCATION

Why we need your help . . .

Your school system is helping in a national study on vocational education. You have been selected as a representative of Cooperative Education students to help with this job placement study. Your answers are very important, and will help to improve vocational education in your school system.

How can you help . . .

On the next page, you will find questions about cooperative vocational education. Most answers can be indicated by placing a check mark "✓" in the box, or by filling in the blanks. Please answer all items as accurately as possible.

Please return the completed questionnaire to your teacher-coordinator.

Thank you for your help.

This information is CONFIDENTIAL; no data will be associated with the name of an individual.

STUDENT

NATIONAL STUDY COOPERATIVE VOCATIONAL EDUCATION

Set II - March - 1981

Program_____

.D. NUMBER _____

Institution_____

Date_____

PARTICIPATING STUDENT - SENIOR

NOTE STUDENT: NONE OF THIS INFORMATION WILL BE SHARED WITH YOUR SCHOOL OR EMPLOYER.

1. Name_____

2. School attending_____

3. State_____

4. Grade_____

5. Are you: (Check only one in each column)

a. ☐ Male
   ☐ Female

b. ☐ Married
   ☐ Single

c. ☐ White
   ☐ Black
   ☐ Oriental
   ☐ Hispanic (Chicano, Puerto Rican, etc.)
   ☐ American Indian
   ☐ Other (specify)_____

6. Date of Birth _____
Month day year

7. What category best classifies your overall school standing by way of grades?

☐ A (90 +)

☐ B (80-90)

☐ C (70-80)

☐ D (60-70)

☐ F (below 60)

8. What was your main reason for joining this program? (check only one)

a. ☐ Needed work for pay

b. ☐ Bored with school

c. ☐ Wanted training for job

d. ☐ Wanted to sample occupations

e. ☐ School policy

f. ☐ Other (specify) _____

9. Who first told you about the cooperative vocational education program?

a. ☐ Teacher

b. ☐ Principal

c. ☐ Counselor

d. ☐ Parent or relative

e. ☐ Friend

f. ☐ Employer

g. ☐ Newspaper

h. ☐ Poster

i. ☐ Other (specify)
_____

10. How many months have you been working in the program?

_____months.

11. How often are you supposed to go to your work assignment?

a. ☐ Every day

b. ☐ Every other day

c. ☐ Every day - every other week

d. ☐ Every other week - every other day

e. ☐ Other (specify)_____

12. How many hours a week are you supposed to work at your job?_____hours.

13. How many hours are you in regular classes every week?

_____hours.

14. Are you paid for your work?

a. ☐ Yes

☐ No

b. What is your hourly pay? $_____/hour.

c. What was your beginning hourly pay? $_____/hour.

15. Has the Cooperative Vocational Education program helped you to decide on an occupation?

a. ☐ Definitely

b. ☐ Much better prepared to make career decision because of my cooperative experience

c. ☐ Somewhat better prepared for career choice

d. ☐ No change in my thinking about career because of cooperative experience

e. ☐ I am more confused about a career since enrolling in coop

16. How closely is your work related to your classwork?

a. ☐ Very closely

b. ☐ Closely

c. ☐ Somewhat

d. ☐ Little

e. ☐ Not at all

17. On the whole, does this job fit in well with your overall job and career interests?

a. ☐ Fits very well

b. ☐ Fits well

c. ☐ Fits moderately well

d. ☐ Fits only a little

e. ☐ Doesn't fit at all

18. Did you like school?

a. ☐ Better before you got into program?

b. ☐ Better after you got into program?

c. ☐ About the same after as before you got into the program?

19. What is the name of the company you work for?

_____

20. What does the company you work for make or do?

_____

21. What is your job title?_____

22. What do you do (job description)?_____

_____

23. Where have you learned the most about the skills needed for your job?

a. ☐ At school

b. ☐ Training station

c. ☐ From parents or relatives

d. ☐ On jobs held before you entered the cooperative ed program.

e. ☐ Elsewhere (specify)_____

24. Do you expect to find a full time job in the occupation in which you are now working?

a. ☐ Yes

b. ☐ No

With the same employer?

a. ☐ Yes

b. ☐ No

25. What do you expect to be doing one year from now?

a. ☐ Working full time

b. ☐ In high school

c. ☐ In a 4-year college

d. ☐ In a 2-year community college or technical school

e. ☐ In a trade school (2 years or less program)

f. ☐ In armed services

g. ☐ Other (specify)_____.

h. ☐ Don't know

If you will be in school one year from now, do you plan to be:

a. ☐ Working full time and going to school part-time

b. ☐ Working full time and going to school full time

c. ☐ Working part-time and going to school part-time

d. ☐ Working part-time and going to school full time

e. ☐ Don't know